2019 Asia-Pacific Meeting of the Economic Science Association

New York University Abu Dhabi
January 24 - 26, 2019

Conference Program
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Conference website:  
http://esa2019nyuad.org/

Location:  
All rooms are in Building A6 at the NYU Abu Dhabi Campus
Keynotes

Tim Cason  
Purdue University

Bertil Tungodden  
Norwegian School of Economics

Lise Vesterlund  
University of Pittsburgh
## Program Overview

**Thursday, January 24, 2019**

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<td>Arabic Brunch, Reception &amp; Registration</td>
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**Friday, January 25, 2019**

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**Saturday, January 26, 2019**

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<td>Closing Lunch</td>
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Thursday, January 24

Keynote Lecture I. (09:55 – 10:55, Room LH007)
• Bertil Tungodden. ‘Fairness and Personal Responsibility’

Parallel Sessions I. (11:00 AM – 12:30 PM)
Session Topic: Labor Markets (Room LH007)
• Lata Gangadharan. ‘Social Dilemmas with Agency Risk.’
• Qian Weng. ‘A Field Experiment on Compensating Differentials: The Case of Job Flexibility.’
• Michal Durinik. ‘Group Identity, Promotions and Confused Subjects.’

Session Topic: Coordination (Room 004)
• Andrzej Baranski. ‘Efficient Coordination through Ex-post Negotiations.’
• Sherry Li. ‘Using Social Connections and Financial Incentives to Solve Coordination Failure: A Quasi-field Experiment.’
• Huanren Zhang. ‘Value Creation and Value Appropriation in Strategic Partnerships: An Experimental Study of Coopetition.’
• John Tisdell. ‘Notions of Equity and Equality in the Formation of Coalitions.’

Session Topic: Auctions (Room 005)
• Lijia Tan. ‘How Auctioneers Set Ex-ante and Ex-post Reserve Prices in English Auctions.’
• Tibor Neugebauer. ‘The Aggregation of Risk Preferences in the First Price Auction.’
• Cary Deck. ‘Emotions in First Price and Dutch Auctions.’
• Ajalavat Viriyavipart. ‘Deterring Bribes with Reserve Price: An Auction Experiment.’

Session Topic: Contests (Room 006)
• Aidas Masiliunas. ‘Learning in Contests with Payoff Risk and Foregone Payoff Information.’
• Lingbo Huang. ‘Arms Races, Trade and Conflict: Experimental Evidence.’
• Christine Harbring. ‘Competing on the Holodeck: The Effect of Virtual Peers and Heterogeneity in Dynamic Tournaments.’
• Felix Kölle. ‘Governance and Group Conflict.’
Session Topic: Social Responsibility (Room 009)

- Alicja Reuben. ‘Subjects in the Lab, Activists in the Field: Public Goods and Punishment.’
- Francisco Gomez Martinez. ‘Can Collusion Promote Corporate Social Responsibility? Evidence from the Lab.’
- Yohanes Eko Riyanto. ‘Pleading with Buyers to Act Socially Responsible: An Experimental Investigation.’

Parallel Sessions II. (1:45 PM – 3:15 PM)

Session Topic: Beliefs (Room LH007)

- Sen Geng. ‘Belief Error and Non-Bayesian Social Learning: Experimental Evidence.’
- Piotr Evdokimov. ‘Higher-order Learning.’
- Simone Häckl. ‘Conscientious Over-placement Versus Biased Self-perception.’
- Tibor Neugebauer. ‘Heterogeneous Beliefs in Experimental Asset Markets Revisited.’

Session Topic: Gender (Room 004)

- Aurelie Dariel. ‘Do Lab Experiments Overestimate the Gender Gap in Competitiveness? The Role of Selection Bias.’
- Julio Mancuso. ‘Gender Differences in Self-promotion: Understanding the Female Modesty Constraint.’
- Yuval Ofek-Shanny. ‘Religion and Gender, Do They Matter? Experiment on Low Stakes Assessment Tests.’
- Agne Kajackaite. ‘Battle for the Thermostat: Gender and the Effect of Temperature on Cognitive Performance.’

Session Topic: Ambiguity (Room 005)

- Anisa Shyti. ‘The Priceless Entrepreneur? A Behavioral Account on Risk and Ambiguity Attitudes.’
- Thomas Garcia. ‘Ambiguity and Moral Wiggle Room in Donations.’

Session Topic: Social Norms (Room 006)

- Fabien Accominotti. ‘The Reification of Performance and the Legitimacy of Inequality: Theory and Experimental Evidence.’
- Hugh Sibly. ‘Are There Norms or Rules for the Fair Division of a Surplus?’
- David Kingsley. ‘Distributive Justice and Trust.’
- Christiane Schwieren. ‘The Effect of Experience on Social Norm Perception in Laboratory Experiment Participants.’
Session Topic: Public Goods (Room 009)

• **Jonathan Livermore.** ‘Two Strikes and You’re Out! An Experiment on Exclusion.’

• **Hande Erkut.** ‘Endogenous Contribution to Local Vs. Global Public Goods with Varying Communication Networks.’

• **Anna Rita Bennato.** ‘Learning by (not) Doing. Behavioral Spillovers in Team Production with Coordinated Punishment.’

• **Duk Gyoo Kim.** ‘Penalty Lottery.’

Parallel Sessions III. (3:35 PM – 5:05 PM)

Session Topic: Lying (Room LH007)

• **Marie Claire Villeval.** ‘Fraud, Reputation and Competition.’

• **Quazi Shahriar.** ‘Deception: The Role of Uncertain Consequences.’

• **Tobias Gesche.** ‘Honesty in the Digital Age.’

• **Georgia Michailidou.** ‘Interdependent Lying Costs: Theory and Experimental Evidence.’

Session Topic: Decision Theory (Room 004)

• **Anthony Newell.** ‘Weighting for a Refined Prospect.’

• **Despoina Alempaki.** ‘Preference Reversals under Strategic Uncertainty.’

• **Bachir Kassas.** ‘Happy to Take Some Risk: A More Accurate Assessment of the Dependence of Risk Preferences on Mood.’

• **Yohanes Eko Riyanto.** ‘Halo Effect in Human-Robot Interaction: How Chatbot Influences Human Decision Making Under Risk.’

Session Topic: Field Experiments (Room 005)

• **Tomomi Tanaka.** ‘The Relationship between Conflicts, Economic Shocks, and Death with Depression, Economic Activities.’

• **Klarizze Puzon.** ‘Regional Identity and Intergenerational Resource Conflict: An Experiment in Guinea.’

• **Nicholas Haas.** ‘Improving Women’s Access to Justice in a Context of Legal Pluralism: Two Experiments on Short and Long-term Approaches in Somalia.’

• **Lamis Saleh.** ‘Punishment Patterns, Violence, and Distress among Syrian Civil War Victims in Syria: A Lab-in-the-Fi.’
Session Topic: Discrimination (Room 006)
- Graeme Pearce. ‘Discrimination in British Carvery Restaurants.’
- Kristine Koutout. ‘Second-Order Beliefs and Gender in the Lab.’
- Jing Li. ‘Gender-biased Task Assignment: Evidence from a Laboratory Experiment.’
- Francisco Lagos. ‘Obesity Discrimination in Hiring: A Natural Field Experiment.’

Session Topic: Preferences (Room 009)
- Zeeshan Samad. ‘Trust and Treachery in Genetic Data Privacy.’
- Xiu Chen. ‘How Time Flies!’
- Dominik Duell. ‘Shared Social Identity and Strategic Uncertainty.’
- Alice Solda. ‘Strategically Delusional’
Friday, January 25

**Keynote Lecture II. (09:00 – 10:00, Room LH007)**

- Lise Vesterlund. ‘Breaking the Glass Ceiling: Insights from Experimental Economics’

**Parallel Sessions IV. (10:30 AM – 12:00 PM)**

**Session Topic: Gender and Competition (Room LH007)**

- Nikos Nikiforakis. ‘Motherhood and the Willingness to Compete for Pay.’
- Ernesto Reuben. ‘Competitiveness and the Gender Gap among Young Business Professionals.’
- Barbora Baisa. ‘Group Membership, Team Payoff and Gender Competitiveness.’
- Hirofumi Kurokawa. ‘Ingroup Bias and Willingness to Compete.’

**Session Topic: Markets (Room 004)**

- Jacopo Magnani. ‘Limited Strategic Thinking and the Cursed Match.’
- Lukas Wenner. ‘Cursed Buyers in the Marketplace.’
- Peter Katusca. ‘Strategy-proofness Made Simple.’
- Xiu Chen. ‘Concentration and Unpredictability of Forecasts in Artificial Investment Games: An Online Experiment.’

**Session Topic: Repeated Games (Room 005)**

- Binglin Gong. ‘Cooperation through Indirect Reciprocity: Impact of Higher-Order History.’
- Maoliang Ye. ‘Does Gradualism Build Cooperation? A Finitely Repeated Investment Experiment.’
- Andrea Isoni. ‘Trust and Mutual Benefit.’
Session Topic: Social Preferences (Room 006)

- **Romain Gauriot.** ‘Altruism or Diminishing Marginal Utility?’
- **Stefania Bortolotti.** ‘Hope and Anger: An Experiment on Inequality and Disruptive Behavior.’
- **Pierluigi Conzo.** ‘Was Banfield Right? New Insights from a Nationwide Laboratory Experiment.’
- **Topi Miettinen.** ‘Revealed Preferences in a Sequential Prisoners’ Dilemma: A Horse-race between Six Utility Functions.’

Session Topic: Decisions under Risk (Room 009)

- **Bodo Vogt.** ‘Hysteresis and Prospect Theory - A Model and Its Experimental Evaluation for Order Effects.’
- **Marc Willinger.** ‘Consumption Smoothing and Subjective Discounting under Background Risk.’
- **Sebastian Schneider.** ‘Higher Order Risk: An Application To Savings of the Poor in Bogota.’

Session Topic: Bounded Rationality (Room 001A)

- **Daniela Di Cagno.** ‘Learning To Avoid Sub-optimality: Experimental Evidence of Intermediate Advice.’
- **Aljaz Ule.** ‘Commitment Aversion Revisited.’
- **Ismael Rafai.** ‘Revealed Preferences under Stochastic Attention. Characterization, Statistical Test and Experimental Evidence.’
- **Fabien Perez.** ‘Self-selection into Strategic Environments.’

Session Topic: Cooperation (Room 001C)

- **Yu Gao.** ‘Unequal Past, Shared Future-reaching Agreement with Responsibilities Passed by Generations.’
- **Jan Frederik Graff.** ‘Reviewing and Predicting Cooperation in Prisoner’s Dilemma Games: A Meta-Study.’
- **Levent Neyse.** ‘Social Comparisons in the Public Goods Game.’
- **Ning Liu.** ‘Visions Fly and Actions Follow: Estimation of Successors’ Actions Enhances Intergenerational Altruism.’
Parallel Sessions V. (1:30 PM – 3:00 PM)

Session Topic: Political Economy (Room LH007)
- **Rebecca Morton.** ‘Social Groups, Information Sharing, and the Effectiveness of Public Protests.’
- **Lionel Page.** ‘Too Big To Prevail: Coalition Formations in the Presence of a Superpower.’
- **Aaron Kamm.** ‘Policy Capture by Special Interests in Democracies: The Role of Revolving Doors and Post-office Employees.’

Session Topic: Nudges (Room 004)
- **Henning Hermes.** ‘Motivating Low-Achievers – Relative Performance Feedback in School.’
- **Haoran He.** ‘Goal Setting, Effort Provision and Performance: A Field Experiment in College Physical Training Courses.’
- **Yu Gao.** ‘It’s So Hot in Here: Information Avoidance, Moral Wiggle Room, and High Air Conditioning Usage.’
- **Shemal Doshi.** ‘Fine as a Nudge: Experimental Evidence.’

Session Topic: Morals (Room 005)
- **Xiangdong Qin.** ‘Two-Stage Moral Behaviors: Some Evidence from Lab Experiment.’
- **Björn Bartling.** ‘Do Markets Undermine Morals?’
- **Wladislaw Mill.** ‘The Normative Perception of Power Abuse.’
- **Vera te Velde.** ‘Is Moral Thinking Marginal Thinking?’

Session Topic: Peer Punishment (Room 006)
- **David Kingsley.** ‘Peer Punishment, Income Inequality and Incomplete Information.’
- **Agnalys Michaud.** ‘Effectiveness of Peer Punishment under Negative Framing.’
- **Andreas Nicklisch.** ‘War Experience, Religiosity, and Punishment Schemes: Field Evidence from Syria.’

Session Topic: Beliefs (Room 009)
- **Matej Lorko.** ‘Historical Information and Project Duration Estimates.’
- **Ritwik Banerjee.** ‘Self-confidence Spillovers and Motivated Beliefs.’
- **Zeeshan Samad.** ‘Self-deception.’
- **Jan Zilinsky.** ‘Learning about Income Inequality Changes Views But Does Not Mobilize Voters.’
Session Topic: Industrial Organization (Room 001A)

- **Silvester Van Koten.** ‘Self-regulation and Meta-regulation – Regulating the Members or the SRO? A Theoretical and Experimental.’
- **Siqi Pan.** ‘Do Exploding Offers Really Explode? The Role of Commitment in Search Deterrence.’
- **Jason Shachat.** ‘Group Identity and Implicit Collusion in Cournot Competition: Theory and Experiments.’
- **Xiaoyuan Wang.** ‘The Effect of Information Disclosure on an Experimental Hold-up Game.’

Parallel Sessions VI. (3:30 PM – 5:00 PM)

Session Topic: Industrial Organization (Room LH007)

- **Francisco Gomez Martinez.** ‘Partial Cartels and Mergers with Heterogeneous Firms: Experimental Evidence.’
- **Jana Peliova.** ‘Experimenting with Price Gouging and Newsvendor Problem.’

Session Topic: Lying (Room 004)

- **Nick Feltovich.** ‘What Kind of Communication Is Best? Cheap Talk with Two Senders and One Receiver.’
- **Manuel Munoz.** ‘Web of Lies: Preventing the Spread of False Information in Networks through Verification.’
- **Frederic Schneider.** ‘The Persistent Power of Promises.’
- **Francesca Marazzi.** ‘Telling the Other What One Knows? Strategic Lying in a Modified Acquiring-a-Company Experiment with.’

Session Topic: Asset Markets (Room 005)

- **Lijia Wei.** ‘Supply Fluctuations and Bubbles of Real Assets: A Experimental Study.’
- **Nilanjan Roy.** ‘Achieving Pareto Optimality even though Prices Are “Wrong”.’
- **Adriana Breaban.** ‘Animal Spirits, Greater Fools, or Safety First: How Do Optimism, Cognitive Reflection, and Risk Aversion.’
- **Christina Rott.** ‘Preference for Housing Services and the Magnitude of Housing Bubbles: Evidence from a Macro-Experiment’
Session Topic: Games (Room 006)
- **John Wooders.** ‘Nash at Wimbledon: Evidence from Half A Million Serves.’
- **James Fisher.** ‘Interacting Cascades Experiment: Informational Spillovers.’
- **Javier Perote.** ‘Endogenous vs. Exogenous Leadership in Teamwork: An Experimental Study.’
- **Jonas Fookem.** ‘Gift Exchange When Gifts Are Taxed.’

Session Topic: Communication (Room 009)
- **Pablo Hernandez-Lagos.** ‘Cooperative Initiative through Pre-Play Communication in One-Shot Games.’
- **Yang Yang.** ‘On Language and Meaning: A Randomized Experiment.’
- **Marianne Stephanides.** ‘Helping and Communication.’
- **Lu Dong.** ‘Talking Behind Your Back: Asymmetric Communication in a Three-person Dilemma.’

Session Topic: Field Experiments (Room 001A)
- **Mirco Tonin.** ‘Pay-What-You-Want To Support Independent Information - A Field Experiment on Motivation.’
- **Maria Recalde.** ‘Leadership and Risk-taking: A Field Experiment on the Mechanisms Underlying Social Influence.’
- **Fernanda Leite Lopez de Leon.** ‘Prejudice in the Age of Brexit: A Field-Experiment.’
- **John Gibson.** ‘Quality, Quantity, and Price: Experimental Evidence on Taxing Soft Drinks.’
Saturday, January 26

Parallel Sessions VII. (9:00 AM – 10:30 AM)

Session Topic: Bargaining (Room LH007)
- Olivier Bochet. 'Experiments on Multidimensional Bargaining.'
- Ben Greiner. 'The Economics of Colors: A Null Result.'
- Bassim Allaheebb. 'The Effect of Effort in the Ultimatum Game: A Cross-cultural Analysis.'
- Lina Lozano. 'The Impact of the Menstrual Cycle on Bargaining Behavior.'

Session Topic: Relative Performance (Room 004)
- Gwen-Jiro Clochard. 'Improved Information or Taste for Ranking? Experimental Evidence of the Role of Relative Performance.'
- Juliana Silva Goncalves. 'Long-lasting Effects of Relative Age at School.'
- Mingye Ma. 'Using Relative Marking Scheme To Motivate Group Effort Provision: Field Evidence from College Students.'
- Bettina Rockenbach. 'Social Context Engineering in Children.'

Session Topic: Public Policy (Room 005)
- Romain Ferrali. 'Partners in Crime? Corruption as a Criminal Network.'
- Chagai Weiss. 'Can Brief Intergroup Contact Affect Attitudes? A Natural Experiment in Israeli Medical Clinics.'
- Matteo Ploner. 'When the State Doesn’t Play Dice: An Experimental Analysis of Cunning Fiscal Policies and Tax Compliance.'

Session Topic: Principal Agent Problems (Room 006)
- Michal Durinik. 'Post Promotion Effort and Group Identity.'
- Mirco Tonin. 'Paying for What Kind of Performance? Performance Pay and Multitasking in Mission-oriented Jobs.'
- Andrej Angelovski. 'Bidding for Better Jobs: An Experimental Comparison of Intra- vs. Inter-firm Hiring.'
- Sibilla Di Guida. 'Testing the Myth of Fee-For-Service and Overprovision in Health Care.'
Session Topic: Methodology (Room 009)

- Stephanie Thomas. 'Using Virtual Environments To Study Health Related Decisions: Early Results Using A New Effort Task.'
- Robert Schmidt. 'Identifying the Distribution of Focal Points in Coordination Games on the Individual Level.'
- Theodore Turocy. 'A Demonstration and Comparison of Estimation Methods for Quantal Response Equilibria in Games.'
- Xu Yan. 'Top-Flop Betting: An Incentive Mechanism To Elicit Unverifiable Truths.'

Session Topic: Bounded Rationality (Room 001A)

- Hanh Tong. 'Individual Heterogeneity in Traveler’s Dilemma.'
- Ada Kovaliukaite. 'The Predictive Success of Theories of Strategic Thinking: A Non-parametric Evaluation.'
- Daniel Schunk. 'An Experimental Beauty-Contest Game with Children and Adults.'
- Konrad Grabiszewski. 'Tree Construction and Backward Induction: A Mobile Experiment.'

Keynote Lecture III. (11:00 – 12:00, Room LH007)

- Tim Cason. ‘Twenty Years of Price Dispersion and Cycles in Laboratory Markets’
DAY 1

Thursday, January 24
Session Topic: Labor Markets (Room LH007)

- **Lata Gangadharan.** ‘Social Dilemmas with Agency Risk.’  
  **Authors:** Tim Cason, Lana Friesen and Lata Gangadharan  
  **Abstract:** Many social dilemmas involve decisions made by firms. This experimental study modifies the standard gift exchange environment employed to represent firms’ principal-agent problem to include a social dilemma and stochastic agent performance. Agents’ unobservable effort choices affect the likelihood of a bad outcome occurring, which harms both the agent’s principal but also others. In our baseline treatment, we omit the agency problem, and principals make their “firm’s” effort decision directly. This provides a baseline measure of principals’ preferences regarding the social dilemma. In the second treatment, principals can only offer an unconditional wage contract to their agent, although a non-contractual (ex-post) bonus can be paid. In our third treatment, wages can be conditioned on the stochastic outcome, and a non-contractual bonus is still feasible. We find that principals use conditional wage contracts to incentivize agents to make their desired effort choice, while unconditional contracts lead to significantly lower effort levels. In contrast to theoretical predictions however, principals use a combination of a conditional wage and the non-contractual (ex-post) bonus to solve the agency problem. Therefore, when conditional wage contracts are possible, agency risk does not exacerbate the social dilemma problem. On the other hand, fixed wage contracts, even with (non-contractual) bonuses, lead to worse outcomes.

- **Qian Weng.** ‘A Field Experiment on Compensating Differentials: The Case of Job Flexibility.’  
  **Authors:** Haoran He, David Neumark, Qian Weng  
  **Abstract:** We explore evidence on compensating differentials and the flexibility of jobs offered by employers, using data from a field experiment on a Chinese job board. In the experiment, we generate random variation across job seekers in invitations to apply for jobs that differ in terms of job flexibility – job flexibility conditions that vary with respect to both when one works (time flexibility) and where one works (place flexibility). We find strong experimental evidence that workers value job flexibility – and especially flexibility regarding place of work. Across the experimental
variation in invitations to apply for jobs that our subjects receive, they are much more likely to apply for flexible jobs, conditional on the salary offered. Moreover, when we administer a questionnaire to job seekers who have applied for our experimental jobs, there is strong evidence they are willing to take lower pay in return for more flexible jobs, in particular jobs with flexibility regarding work location. Finally, non-experimental data from the job board we utilize does not find evidence that workers value job flexibility. The contrast with the experimental evidence indicates that experimental data can be valuable in providing evidence on workers’ willing to pay for positive job amenities or to avoid negative job amenities.

• Michal Durinik. ‘Group Identity, Promotions and Confused Subjects.’
Authors: Michal Durinik, Maros Servatka, Lyla Zhang
Abstract: Are decision makers more likely to promote internal candidates than external ones? And do they favor internal candidates even if they are less productive? We employ a novel setup, where using a Multiple Price List decision makers engage in other-other allocations that also impacts their own earnings. We find that decision makers maximize their own earnings first and only when indifferent in this respect they consider group identity. We frame the experiment in a neutral language of “selections” and “Participants”. We find that a significant proportion of decision makers display multiple switching behavior in the multiple price list. We, therefore, introduce a labor market framed treatment with “promotions” and “workers” and find similar behavior patterns with lower incidence of multiple switching behavior. This suggests that loaded language helps subject comprehension and does not need to be associated with loss of experimental control.

Session Topic: Coordination (Room 004)
• Andrzej Baranski. ‘Efficient Coordination through ex post Negotiations.’
Abstract: Synergies in production are ubiquitous in shared production processes such as those involving individuals within a team, departments within a firm, or industries within a country. Using a weakest-link game with ex post bargaining to redistribute the joint surplus we study a situation in which no central manager (or principal) can induce coordination through contracts, but instead team members themselves decide how to compensate each other. We show that standard bargaining theory (stationary equilibria)
predictions do not provide a rationale for selecting efficient outcomes among the multiple Pareto-ranked equilibria. Nevertheless, we propose history-dependent bargaining strategies based on members’ contributions which refine the set of equilibria selecting only the most and least efficient outcomes. An experiment reveals that ex post bargaining leads to enhanced efficiency compared to the benchmark weakest-link game. This is a particularly strong result since we implement a random subject rematching protocol. When efforts are not publicly known (due to monitoring costs for example) average effort falls close to that observed without bargaining and a similar result holds when the distribution of the surplus is private information.

• **Sherry Li.** ‘Using Social Connections and Financial Incentives to Solve Coordination Failure: A Quasi-Field Experiment.’

  **Authors:** Farzana Afridi, Amrita Dhillon, Sherry Xin Li, Swati Sharma

  **Abstract:** Production processes are often organized in teams, yet there is limited evidence on whether and how social connections and financial incentives affect productivity in tasks that require coordination among workers. We simulate assembly line production in a lab-in-the-field experiment in which workers exert real effort in a minimum-effort game in teams whose members are either socially connected or unconnected and are paid according to the group output. We find that group output increases by 18% and coordination improves by 30-39% when workers are socially connected with their co-workers. Connected groups continue to coordinate better when we introduce a lump sum bonus, suggesting that financial and social incentives can be complementary in this setting. Our results are driven by men whose average productivity is significantly lower than that of women. These findings can be plausibly explained by trust between co-workers in socially connected teams.

• **Huanren Zhang.** ‘Value creation and value appropriation in strategic partnerships: An experimental study of coopetition.’

  **Abstract:** Many inter-organizational and intra-organizational activities involve both cooperation and competition: economic agents cooperate to use their complementary resources to create value but at the same time compete for the created value. In this paper, we design a 2-player coopetition game to study this tension between value creation and value appropriation both theoretically and experimentally. Equilibrium analysis shows that this game has multiple equilibria: one with zero co-created value
and the other with positive co-created value. Consistent with the analysis, when there is competition for existing values, players invest more in value appropriation and less in value creation. We find that individuals are conditional cooperators: players adjust their investment in value creation in the direction of matching their opponents’ investment level in the previous round. Previous experience has a significant influence on cooperation and competition level even the environment has changed.

• **John Tisdell.** ‘Notions of equity and equality in the formation of coalitions.’

**Abstract:** The study has two objectives (1) to better understand strategic coalition formation in cooperative games and (2) evaluate how well traditional cooperative game solutions compare to experimental results. In terms of understanding strategic coalition formation in cooperative games we found (a) the formation of grand coalitions is rare even when it is beneficial to form such coalitions, and (b) whether an equality outcome existed or not, and whether it was within the core or not has a substantial impact on the distribution of final payoffs. In terms of the relative merits of game theory modelling and economic experiments we found them to be largely consistent. The contribution of the study is in demonstrating the importance notions of equity and equality in explaining strategic behaviour in the formation of coalitions.

**Session Topic: Auctions (Room 005)**

• **Lijia Tan.** ‘How Auctioneers Set Ex-Ante and Ex-Post Reserve Prices in English Auctions.’

**Authors:** Lijia Tan, Jason Shachat

**Abstract:** We provide a direct experimental comparison of auctioneer behaviour in the English auctions with reserve price (ex-ante reserve price) and the English auctions with bargaining (ex-post reserve price). These two mechanisms indirectly implementing Mayerson’s optimal mechanisms have two counterintuitive predictions: optimal ex-ante reserve prices are independent of the number of bidders and optimal ex-post reserve prices are independent of the auction price. We consider two behavioral models, anticipated regret model (Davis et al., 2011) and subjective conditional probability model which is a general form of subjective posterior probability model (Shachat and Tan, 2015), to formulate the hypotheses.
as well as predict the experimental outcome respectively. We find that a s-shaped distorted conditional probability judgement provides a consistent explanation of why buyers deviate the two counterintuitive predictions while anticipated regrets only can explain the first half. Moreover, we do not find a significant difference between the average buyers’ profit in two mechanisms under the environment of uniform cost distribution. And therefore we design a subsequent experiment with a high-cost environment where the anticipated regret model predicts buyers yield less profit in ex-ante reserve price auctions. Experimental results show that there is rather no significant difference between two mechanisms in term of the buyers’ profit, being consistent with our out-of-sample predictions based on s-shaped distorted conditional probability judgement.

• **Tibor Neugebauer.** ‘The Aggregation of Risk Preferences in the First Price Auction.’

Authors: Tibor Neugebauer, Gabriel Kaiser

Abstract: This paper presents and evaluates models that aggregate the risk aversion coefficient elicited from four independent first-price sealed-bid auctions of different market size without information feedback but common value. The contribution of this paper is twofold. First, we confirm the overbidding effect, curse of winning, which is decreasing in market size. Furthermore, we observe that the bid-value ratio converge to one relative to the RNNE with increasing market size, using a novel sample. Secondly, we provide an evaluation of equilibrium models that differ in aggregation methods of the four market sizes per individual. We aim to find a model that does not fail to model the curse of winning, such as the RNNE, but simultaneously considers the decrease of the overbidding effect with increasing market size. The conducted horse race reveals the Decreasing overbidding model as superior replicating the overbidding phenomena.

• **Cary Deck.** ‘Emotions in First Price and Dutch Auctions.’

Authors: Adriana Breaban, Cary Deck, Erik Johnson

Abstract: We analyze the emotional reactions of subjects competing in first price and Dutch auctions. The observed facial expressions suggest that the theoretically isomorphic auction formats elicit different emotional reactions. In particular, bidders in Dutch auctions who have high values become more aroused and positive as the auction progresses. However, overall subjects in both formats are not happy during the experiments.
• Ajalavat Viriyavipart. ‘Deterring bribes with reserve price: an auction experiment.’

Authors: Pacharasut Sujarittanonta and Ajalavat Viriyavipart

Abstract: This paper experimentally investigates bribing behaviors in the first-price sealed-bid auctions with private and independent values. Before the auction, one bidder may offer the other bidder for a commitment not to participate in the auction. We consider two treatments: one with no reserve price and one with the optimal reserve price. Even though theory predicts no bribe offered in any of the treatments, we observe prevalent bribing and the bribes were frequently accepted in both treatments. The responders demand a larger proportion of benefit in the treatment with reserve price, while the proposers offer proportionally the same bribe amounts in the two treatments. As a result, the average bribe amount and rate of successful bribes are significantly lower in the treatment with reserve price. Although imposing the reserve price reduces efficiency, its optimality and bribe deterrence shift surplus from the bidders to the seller.

Session Topic: Contests (Room 006)

• Aidas Masiliunas. ‘Learning in contests with payoff risk and foregone payoff information.’

Abstract: It is not well understood why game theory explains behavior in some games, but not in others. Tullock contest is an example of a game in which choices significantly deviate from Nash equilibrium predictions, and it is not clear why. We test a hypothesis that deviations are caused by slow convergence of a boundedly-rational learning process. We identify two elements of the game that slow down payoff-based learning, and eliminate them in an experiment. First, the distribution of payoffs generated by each action depends on opponent’s action that varies over time. We eliminate this source of payoff variability by providing foregone payoff information, allowing all actions to be evaluated against the same sequence of opponent’s actions. The second element is payoff risk, which slows down learning by reducing the correlation between realized and expected payoffs. We manipulate payoff risk using a 2x2 design: payoffs from contest investments are either risky (as in standard contests) or safe (as in proportional contests), and payoffs from the part of endowment not invested in the contest can also be either safe (as in standard contests) or risky. We find that Nash equilibrium rates go up to 100% when payoff
risk is not present and foregone payoff information is available, but are at most 20% in all other cases. This result can be explained by payoff-based learning but not by other theories that might interact with payoff risk (non-monetary utility of winning, risk-seeking preferences, spitefulness, probability weighting, QRE). We propose a hybrid learning model that combines reinforcement and belief learning with preferences, and show that it fits data well, mostly because of reinforcement learning.

• **Lingbo Huang.** ‘Arms races, trade and conflict: Experimental evidence.’

  **Authors:** Klaus Abbink; Lu Dong

  **Abstract:** We study escalation and aggression in an experimental first-strike game. Two players play multiple rounds of a money-earning task. In each round, each player can spend money to accumulate weapons. The player with more weapons can strike against the other player, which almost totally eliminates the victim’s earnings potential, and the victim loses the capacity to strike. In four treatments, we find that deterrence works better if it cannot be observed, that a balance of power is effective in keeping peace, and that mutually beneficial trade decreases the risk of confrontation, but not necessarily the likelihood of costly arms races.

• **Christine Harbring.** ‘Competing on the Holodeck: The effect of virtual peers and heterogeneity in dynamic tournaments.’

  **Authors:** Frederik Graf, Christian Grund and Christine Harbring

  **Abstract:** We propose a new approach to examining heterogeneity in dynamic tournaments. We simulate a realistic working situation in a highly immersive environment. Implementing a tournament in virtual reality (VR) allows us to ceteris paribus control for the performance of the virtual peer (humanoid avatar), and thus to get an understanding of the reaction of the subject to the avatar in a really dynamic setting, as the subject is constantly able to observe the avatar’s performance. Moreover, we are able to mitigate the reflection problem, which usually undermines research on dynamic interaction. Based on a first experimental phase, we are able to match our subjects with an avatar yielding a specific output. We observe that the subjects’ performance is highest in a homogeneous tournament, i.e., when they compete against an avatar achieving the same output as they did in the preceding phase. Interestingly, these results are
particularly driven by peer effects rather than by tournament incentives. We extensively track the behavior of subjects and the particular situation and, e.g., examine the role of intermediate score differences and the degree of the subjects’ movements.

• Felix Kölle. ‘Governance and Group Conflict.’

Abstract: Many situations in the social and economic life are characterized by rivalry and conflict between two or more competing groups. Warfare, socio-political conflicts, political elections, lobbying, R&D competitions, and promotion tournaments, are all examples of inter-group conflicts in which groups spend scarce and costly resources to gain an advantage over other groups. The groups that compete in such contests are typically not created equal. In this paper, we report on an experiment that investigates the impact of institutions on the development of conflict. The role of institutions have been studied extensively in the area of cooperation in social dilemma situations, and are at the heart of the long lasting debate on why there are pronounced cross-country differences in economic growth, development, inequality, and poverty. Yet, to what extent different institutions affect the development of group conflict is not yet well understood, and clean empirical evidence on this question is almost absent. This project aims at filling this gap by comparing conflict behavior between prominent types of institutions affecting how decisions are determined within groups: Autonomy (each group member individually decides on his/her conflict engagement), democracy (a group’s conflict engagement is determined democratically by voting), and dictatorship (the group’s conflict engagement is determined by a single group member, the dictator). As a workhorse for studying group conflict, we use an experimental version of Tullock’s contest game. In line with our predictions, we find that democracy leads to higher conflict expenditures compared to the autonomy case, but that, in contrast to our predictions, dictatorship does not further increase conflict. When letting subjects endogenously adopt an institution, however, we find the dictatorship to be the least popular, as it comes with the highest degree of inequality.
Session Topic: Social Responsibility (Room 009)

• **Alicja Reuben.** ‘Subjects in the Lab, Activists in the Field: Public Goods and Punishment.’

  **Authors:** Chetan Dave, Sjur Hamre, Curtis Kephart

  **Abstract:** We compare standard (laboratory) and non-standard (field) subject pool behavior in an extensive form public goods game with random punishment. Our experimental investigation is motivated by real-world ‘Activists’ in assisting local public goods provision by Firms; an activity known as corporate social responsibility (Benabou and Tirole (2010), Baron (2001)). We find that relative to lab subjects, real-world activists in Mumbai, India are more willing to settle at the Nash equilibrium of the game (which entails increased provision of public goods) and are more willing to punish non-cooperative behavior on the part of firms even if such punishment hurts their own payoffs.

• **Francisco Gomez Martinez.** ‘Can Collusion Promote Corporate Social Responsibility? Evidence from the Lab.’

  **Authors:** Francisco Gomez Martinez, Sander Onderstal, Maarten Pieter Schinkel

  **Abstract:** Established findings that competition erodes socially responsible behavior on markets suggest that collusion between firms may promote it. Theoretically, collusion among profit-maximizing firms may increase sustainable production, in particular because coordination allows them to differentiate their products, but at the expense of consumers paying higher prices. However, if firms have an intrinsic motivation for corporate social responsibility (CSR), allowing them to collude can benefit consumers if firms coordinate on selling the same greener quality. We test collusion with CSR preferences in three laboratory experiments. Participants playing the role of firms can choose between offering a ‘fair’ and an ‘unfair’ good to a consumer after which they post a price. Subsequently, the consumer can choose between the two offers. We vary whether or not the firms can coordinate on the type of good they sell. We observe that participants’ CSR preferences are positively correlated with them offering the fair good in the role of firm. Market interaction erodes CSR preferences in both treatments. The opportunity to coordinate on product quality separates the product types offered to and traded on the market into two extremes: only fair and only unfair. The fraction of fair goods on average is the same across treatments. The increase in product homogeneity in each extreme
type does soften cartel overcharges: prices in the cartel treatment can even decrease. We identify characteristics that shift the mass of product quality more to fair production. These findings suggest that allowing collusion for the purpose of promoting sustainable production may stimulate a green top-line product variety, but it diminishes sustainability of the remainder of the product spectrum in an offsetting way.

- **Yohanes Eko Riyanto.** ‘Pleading with Buyers to Act Socially Responsible: An Experimental Investigation.’

**Authors:** Yohanes E. Riyanto, Yan Wang, and Yew Kwang Ng

**Abstract:** We experimentally investigate the role of third parties’ effort to make a plea to buyers to choose a fair (socially responsible) product that does not exert any negative externalities on third parties in a posted-offer market environment. In our setup, sellers face a choice of producing a fair or an unfair product. We vary sellers’ relative costs of producing a fair product vis-a-vis an unfair product. We investigate what influences the increase in these relative costs have on sellers’ incentives to produce a fair product and buyers to purchase a fair product instead of an unfair product, and on the effectiveness of third parties’ plea. We show that such pleading can promote socially responsible behavior through its effects on changing both sellers’ and buyers’ attitude towards third parties’ welfare.

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**Parallel Sessions II. (1:45 PM – 3:15 PM)**

**Session Topic: Beliefs (Room LH007)**

- **Sen Geng.** ‘Belief Error and Non-Bayesian Social Learning: Experimental Evidence.’

**Authors:** Bogaçhan Çelen, Sen Geng, and Huihui Li

**Abstract:** This paper experimentally studies whether individuals hold a first-order belief that others apply Bayes’ rule to incorporate private information into their beliefs, which is a fundamental assumption in many Bayesian and non-Bayesian social learning models. We design a novel experimental setting in which the first-order belief assumption implies that social information is equivalent to private information. Our main finding is that participants’ reported reservation prices of social information are significantly lower than those of private information, which provides evidence that casts doubt on the first-order belief assumption. We also build
a novel belief error model in which participants form a random posterior belief with a Bayesian posterior belief kernel to explain the experimental findings. The structural estimation of the model suggests that participants’ sophisticated consideration of others’ belief error and their exaggeration of the error both contribute to the difference in reservation prices.

- **Piotr Evdokimov.** ‘Higher-order Learning.’
  
  **Authors:** Piotr Evdokimov and Umberto Garfagnini
  
  **Abstracts:** We study experimentally how subjects learn about the beliefs of others and identify several empirical facts. First, higher-order beliefs account for how lower-order beliefs are formed and in particular are updated more slowly when information about lower-order beliefs is uncertain. Second, higher-order beliefs do not correctly take into account the heterogeneity in how lower-order beliefs are formed and, as a result, become less accurate as more information about lower-order beliefs is received. Third, a significant fraction of higher-order beliefs mistakenly treats private information as public. We discuss the implications of our results for models of common learning, information projection, and macroeconomic dynamics.

- **Simone Häckl.** ‘Conscientious over-placement versus biased self-perception.’
  
  **Abstract:** In a real-effort, laboratory experiment, we challenge the assumption that over-placement is driven by a biased self-perception, i.e., overconfidence, and provide evidence for conscious overstatement of ability. We find that participants, who over-place themselves prior to working on the task, work harder in the subsequent real-effort task, even if this is costly to them. This indicates not only awareness of the over-placement, but also a willingness to pay to live up to their self-assessment. Furthermore, we find that women adapt their self-assessment in the presence of public observability and feedback, while we do not find such effects for men.
• **Tibor Neugebauer.** ‘Heterogeneous beliefs in experimental asset markets revisited.’

**Authors:** Michael Mitzkewitz and Tibor Neugebauer

**Abstract:** We investigate the question if we can recover original trader’s beliefs in experimental asset taking recourse in econometrics and experimental design. We conduct new experimental sessions to investigate how much of subjects’ individual expectations is home-made and how much is affected by the market environment. Our results suggest reliable recovery of median expectations when subjects have the same information. Treatment comparison suggests no effect on beliefs of subjects’ action space, whether they trade or observe the market. We suggest several models to recover the individual expectations to conclude that we are unable to recover the individual expectations. We draw that conclusion after observing that the median expectation fits the individual expectation as well or better than the other models. Hence, we reconfirm the observation that beliefs in asset markets are heterogeneous.

**Session Topic: Gender (Room 004)**

• **Aurelie Dariel.** Do lab experiments overestimate the gender gap in competitiveness? The role of selection bias.’

**Authors:** Aurelie Dariel, Nikos Nikiforakis & Jan Stoop

**Abstract:** Evidence from laboratory experiments suggests there is a robust difference in the willingness to compete between men and women. The extent to which this gender gap in competitiveness is affected by selection bias, however, is unknown. We measured the willingness of 1,145 students to compete in a classroom experiment thus avoiding selection effects. Separately, we invited all of them to participate in a laboratory experiment using common recruitment procedures. To evaluate the impact of selection bias on the estimated gender gap, we compare the choices of students who eventually participated in a laboratory experiment to those who did not. Although a significant gender gap is found for participant and non-participant samples, we find that the estimated gender gap is approximately twice as large in the laboratory sample as in the original population.
• **Julio Mancuso.** ‘Gender differences in Self-Promotion: Understanding the female modesty constraint.’

**Abstract:** Individuals are often required to self-promote for professional recognition and career success. In this paper, we investigate the existence and the determinants of gender differences in self-promotion. Using a novel experiment, we show that women are significantly less likely to self-promote relative to men. We establish that the difference in behavior across gender is determined by women’s social image concerns of being perceived as immodest and not because of an inherent preference for modesty. We find that the provision of a justification to self-promote leads to the elimination of the gender gap.

• **Yuval Ofek-Shanny.** ‘Religion and Gender, Do they Matter? Experiment on Low Stakes Assessment Tests.’

**Abstract:** Standardized assessment tests are increasingly used as an important policy and research tool. We examine how eighth graders perform, based upon gender and religion, on a real-life high-stakes test in comparison to a low-stakes test. Both tests were in the Israeli national math assessment test design. Overall, Jews have a significantly smaller (15.4 points) grade difference between the high-stakes and the low-stakes test than Arabs (23.7). This suggests that 60% of the Jewish-Arab performance gap in national assessment tests can be attributed to effort differences in the test itself rather than in student ability. Furthermore, we find that Muslim girls achieve higher grades in low-stakes assessment tests than similar ability Muslim boys. However, we find that religious Jewish girls perform worse than similar ability religious Jewish boys. We find no difference in gender with secular Jewish and Christian Arab students. This study shows the need for a careful examination and analysis of performance gaps across population groups. On a broader scale, we show that educational reforms and educational and economic policy must use caution when assessing the policy results according to low-stakes assessment tests such as the PISA, TIMSS, etc.
• **Agne Kajackaite.** ‘Battle for the Thermostat: Gender and the Effect of Temperature on Cognitive Performance.’

**Authors:** Tom Chang & Agne Kajackaite

**Abstract:** This paper studies the effect of temperature on cognitive performance by men and women in a large controlled lab experiment (N=543). We find that temperature has significant and heterogeneous effects across men and women. For women, higher temperatures are associated with better performance on both a math and verbal task while the reverse is observed for men. In contrast, temperature had no impact on a measure of cognitive reflection for both genders. The positive change in female performance in response to higher temperature is significantly larger and more precisely estimated than the corresponding opposite effect on male performance. This finding suggests that in gender balanced offices one may be able to increase productivity by setting the thermostat higher than current standards.

Session Topic: Ambiguity (Room 005)

• **Anisa Shyti.** ‘The Priceless Entrepreneur? A Behavioral Account on Risk and Ambiguity Attitudes.’

**Authors:** Amir Sasson, Corina Paraschiv

**Abstract:** Prior research suggests that entrepreneurs are rewarded for bearing ambiguity. Evidence, however, reports no difference in risk/ambiguity attitudes between entrepreneurs and non-entrepreneurs. We reconcile this inconsistency through two prospect theory experiments and a population study of entrepreneurs. Experimental results show that entrepreneurs are more ambiguity tolerant than non-entrepreneurs, and demand higher wage equivalents to abandon an entrepreneurial project. In the population study of equilibrium wages of entrepreneurs who return to employment, we both corroborate the experimental findings and disentangle skill premia, the price of strategic human capital, from ambiguity premia, the price of entrepreneur’s freedom. Findings support unique and substantial ambiguity premia. We argue that entrepreneur’s ambiguity tolerance may influence strategic decision making and drive impactful exploratory strategies in uncharted terrains, within and outside the firm.
• **Thomas Garcia.** ‘Ambiguity and moral wiggle room in donations.’

**Authors:** Sébastien Massoni and Marie Claire Villeval

**Abstract:** Individuals are generally less generous in situations where the relationship between their actions and resulting outcomes is vague. Risk is a simple way of distorting the relationship between actions and outcomes. Our experiment indicates that donations with a risky cost are affected by self-excusing behaviors in the sense that individuals use the risk to decrease their donations. However, donations with risky benefits are not affected by such behavior. Ambiguity describes real-life situations better than risk as it reflects the lack of information that individuals face in their everyday lives. Under ambiguity, the relationship between their actions and resulting outcomes is also more equivocal than under risk as the uncertainty is not quantified anymore. However, our experiment indicates that excuse-driven behaviors are not reinforced under ambiguity. It thus seems that excuse-driven motivations do not interfere in the formation of ambiguity preferences.

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**Session Topic: Social Norms (Room 006)**

• **Fabien Accominotti.** ‘The Reification of Performance and the Legitimacy of Inequality: Theory and Experimental Evidence.’

**Authors:** Fabien Accominotti, Daniel Tadmon

**Abstract:** In this project we argue that the legitimacy of economic inequality owes in part to operations that make observers believe in the existence of a true hierarchy of worth, performance, or talent between the individuals in a population. Specifically, we explore how the reification of employee performance in organizations—*that is, the presentation of performance as a crisp and clear-cut “thing”, such as a rating for example*—contributes to legitimize inequality in employee compensation. The idea is that by removing ambiguity and uncertainty around performance (and about differences in performance across employees) reification makes inequality in compensation more acceptable to those in charge of setting compensation levels, and more generally to outside observers.

The project tests this mechanism by asking experiment participants to divide a $10,000 year-end bonus between three employees based on the reading of their annual performance reports. (The employees, who occupy similar,
junior positions at a medium-sized U.S. firm, are fictional, but participants are not told so, and performance reports are designed to be as realistic-looking as possible). Participants are randomly assigned to two main conditions. In the first one, which we refer to as the “non-reified” condition, the reports are narrative evaluations. While it is relatively clear from these reports which employee is better and which is worse, there remains some ambiguity about their relative performance by the mere virtue of the narrative format. In the “reified” condition, in contrast, participants read the same narrative reports accompanied by a crisp rating of the employees’ performance on a verbal scale, ranging from “unacceptable” to “exceptional.” To make sure that these ratings accurately reflect the underlying performance of each employee ‘ so that the difference between conditions is only the greater or lesser degree of reification of performance ‘ we first ask an independent group of participants to rate the initial, narrative reports, and we feed these ratings into the reports participants see in the reified condition.

The experiment, which was preregistered with the Open Science Framework and run through Amazon’s Mechanical Turk with a sample of over 3,100 respondents in the United States, shows that participants in the reified condition are indeed more willing to reward the three employees unequally, even though the relative performances of employees are the same across conditions. The bonus gap between low- and high-performing employees increases by a substantial 20%, from $1,888 to $2,256, between the non-reified and reified conditions. It rises by an additional 10% between the non-reified condition and an extra condition where employee ratings are presented as quantified scores. This means that evaluation devices such as ratings and rankings do not just artificially reify the merit and ability of individuals in the workplace. In doing so they also make us more accepting of the idea that different individuals are indeed more or less talented and valuable, thereby increasing our willingness to accept unequal rewards between them. This has direct implications for understanding the legitimacy of economic inequality in contemporary societies ‘ and ultimately for working toward a reduction of this inequality.
Hugh Sibly. ‘Are there norms or rules for the fair division of a surplus?’

Authors: Nilss Olekalns, Hugh Sibly and Amy Beth Corman

Abstract: Consider the division of a surplus between two people who both contributed to its creation. Are there rules or norms that guide the fair division of the surplus? Three well known normative rules that have emerged from the literature on distributive fairness might guide the answer to this question: Strict Egalitarianism (SE), where fairness requires that all inequalities are always equalized; Libertarianism (L), where fairness requires everybody receives what he or she contributes (produces); and Liberal Egalitarianism (LE), where inequalities should only arise from factors under individual control (Cappelen et. al., 2007).

In this paper we present an experiment where participants are asked to identify the fair play in a series of allocation games (a representation of a coordination game which can be interpreted as determining the allocation of as surplus). Participants are truthfully told that the payoffs in these coordination games were determined by a procedure in a previous experiment. In the prior experiment, the contribution to the underlying surplus was determined in one treatment by the participant’s effort and in the other treatment by luck. These allocation games have two equilibria, one which represent the allocation of the surplus by individual contribution and the other by equal division.

Participants in the current experiment were paid when they identified the same fair allocation as the most popular choice by other participants in their session. If the fair division represents the focal point equilibrium, the most popular choice can be interpreted as corresponding to the commonly adopted fair sharing rule.

We find that there is no social norm of fairness that correspond to SE, LE or L. However there does appear to be systematic influences on the choices made by participants: the increased size of the surplus and a reduction in the difference of individual contributions to the surplus increase the frequency that the 50/50 sharing rule is identified as fair. Furthermore, individuals who exhibit a high level of the personality trait ‘conscientious’ also are more likely to identify the 50/50 sharing rule as fair. We do not find any gender effects.
• David Kingsley. ‘Distributive Justice and Trust.’

Abstract: After participating in a real effort task (the slider task) one of each pair of participants is able to distribute the combined earnings. Previous research suggests that subjects reveal a self-serving bias in the distributions chosen. This paper asks whether the expectation of future interaction will alter the observed distributions. Are preferences for distributive justice strategic? In this case, the future interaction is a Trust Game (TG) to be played among the same partnered pairs of participants. Across treatments participants may or may not have full information concerning the TG. Preliminary results (data collection is on-going) suggest that when dictators are aware of the TG, chosen distributions are less selfish and more consistent with Just Deserts (each get the proportion of the total that they produced). The greater level of distributive justice (fewer selfish distributions) in the full information treatment leads to larger transfers from the first mover to the second more, and, importantly, also to larger back-transfers from the second mover to the first mover. Interestingly, this effect is only observed when the dictator acts as the first mover and is not observed when the dictator acts as the second mover. This suggests, although data remains limited, that strategic considerations of intent play an important role in distributive preferences, trust, and reciprocation.

• Christiane Schwieren. ‘The effect of experience on social norm perception in laboratory experiment participants.’

Authors: Robert Schmidt; Christiane Schwieren; Alec Sproten

Abstract: Economic research makes extensive use of laboratory experiments for studying individual behavior in a controlled environment. However, methodological limitations of laboratory experiments are increasingly the focus of discussion. One important point is the question of generalizability in general, and the representativeness of the participants in experiments more specifically. While older criticism focused on the fact that students are not representative for a general population, recent papers also discuss whether volunteers are representative for the population from which they are drawn, i.e. the pool of students (e.g. Slonim et. Al, 2013; Cleave et al., 2013; Falk et al., 2013). Another line of literature discusses whether laboratory participants behave differently depending on the experience they have with economic experiments (Cleave et al.
In the current paper, we focus on the latter and report an experiment to shed further light on behavioral effects of extensive laboratory participation by studying how the perception of social norms differs between experienced and inexperienced participants of laboratory experiments. We compare descriptive norms and injunctive norms for behavior within the laboratory context and perceptions about socially appropriate behavior between the lab context and a real world context. Finally, we elicit perceptions about how behavior in the laboratory relates to behavior in the field. We find that differences in descriptive norms about behavior within the laboratory context are by far the most important difference between the two groups we study—“new” participants or “lab rats” with at least 10 participations. Injunctive norms also differ between the two groups, but to a lower extent. It seems as if inexperienced participants have naïve expectations about how subjects treat each other in laboratory experiments. Once they learn how “normal” or average behavior looks like in the laboratory, they adapt their perception about socially appropriate behavior and, consequently, their own behavior. We find no evidence for selection effects with respect to (inductively) socially appropriate behavior in the real world. We thus conclude that participants of laboratory experiments are representative for the pool that they are drawn from, but experience in the lab shapes their behavior and expectations for that specific context.

Session Topic: Public Goods (Room 009)

- Jonathan Livermore. ‘Two strikes and you’re out! An experiment on exclusion.’

Abstract: To date, research conducted on exclusion in cooperative work settings has only examined forms of exclusion without the need for prior warning. However, in many cases poor performers have to receive a warning in the form of a strike prior to being excluded from their group. This study provides a comparison between a two-strike exclusion policy and a zero-tolerance exclusion policy as a means for fostering cooperation in groups. We address the following research questions: (i) how do group members respond to receiving strikes, and (ii) how effective is a two-strike exclusion policy relative to a zero-tolerance exclusion policy? The results from our experiment suggest that group members tend to cooperate more after
receiving a strike. However, requiring group members to issue strikes to one another prior to exclusion seemed to be less effective than allowing for exclusion without prior receipt of strikes. As a result, a zero-tolerance policy for excluding free riders may indeed be the most effective and efficient form of exclusion for fostering cooperation in groups.

• **Hande Erkut.** ‘Endogenous contribution to local vs. global public goods with varying communication networks.’

  **Authors:** Hande Erkut and Ernesto Reuben

  **Abstract:** One particular problem with the contributions to public goods is whether to contribute to a less efficient local public good that will have positive externality for a small amount of people or to a more efficient global public good that will have positive externality for a larger population. We study whether allowing for partial communication can be harmful by leading people to contribute to less efficient local public good instead of the global public good. Results suggest that partial as opposed to full communication result in a decrease in global public good contributions.

• **Anna Rita Bennato.** ‘Learning by (not) doing. Behavioral spillovers in team production with coordinated punishment.’

  **Authors:** Katarina Dankova, Enrique Fatas, and Antonio J Morales

  **Abstract:** This paper reports on an experiment designed to test the effectiveness of coordinated punishment in teams. In our setting, participants decide how much to contribute to a team account in the first stage of the game and punish other team members in the second. While team production technology is linear, punishment requires coordination, as punishers pay in full the points they send but only the minimum number of points is received by punished participants. We study how the presence of an enforcing institution in one domain (sanctions) shapes behavior in another (contributions). We compare two punishment institutions (of High and Low effectiveness) with three benchmarks (with and without punishment). Coordinated punishment significantly, but moderately, increases contributions in both the High and Low conditions, and significantly increases earnings only in the former. We find strong evidence of behavioral spillovers between the punishment and contribution stages in the High condition. Successful teams learn to contribute most of their endowment without learning to punish, as they fail to coordinate sanctions.
• Duk Gyoo Kim. ‘Penalty Lottery.’
Abstract: I propose a new institution, penalty lottery, to control sequential public bad productions under imperfect monitoring for punishment: A violator (a citizen who produced a public bad and got monitored) hands over the fine to the next potential violator with some probability, and pays all the accumulated fines with the complementary probability. Although the overall fraction of violators eventually approaches zero, it takes substantial time periods when heterogeneities in citizen’s attributes including risk preferences are considered. The penalty lottery self-selects those who are more willing to produce a public bad, and hence endogenously imposes the larger expected fines to them. The penalty lottery has advantages over the day fine system in which the fine payment depends on the offender’s daily personal income, as it can endogenously implement the day fine system. From lab experiments with abstract framing, I find strong support of the theoretical predictions.

Parallel Sessions III. (3:35 PM – 5:05 PM)
Session Topic: Lying (Room LH007)
• Marie Claire Villeval. ‘Fraud, Reputation and Competition.’
Authors: Chloe Tergiman and Marie Claire Villeval
Abstract: We study whether fraudulent announcements of high returns by project managers can be mitigated by reputation and by the introduction of standard market mechanisms. In our laboratory experiment project managers announce to potential investors the likely return of their funds. Announcements are cheap talk and lies can be potentially detected ex post by investors. We compare four treatments. In the Control treatment one investor is matched with one project manager and pairs are reshuffled at each new period. In the Reputation-No Competition treatment one investor is matched with one project manager and pairs remain fixed. In the Competition-No-Reputation treatment each investor is matched with two project managers and groups are randomly rematched in each period. Finally, in the Competition-Reputation treatment each investor is matched with the same two project managers throughout the session. We find that reputation reduces the relative frequency of lies without eliminating fraud.
Instead of encouraging more honesty, market mechanisms lead project managers to inflate even more their announcements to attract investors. Reputation in competitive markets reduces fraud but cannot eliminate the negative effect of competition on ethics. The experiment shows also evidence of strategic downward lying.

• **Quazi Shahriar.** ‘Deception: The Role of Uncertain Consequences.’

  **Abstract:** We study how decisions to lie extend to risky environments. We provide experimental evidence from a sender-receiver game where there is uncertainty over the amount by which a sender’s lie reduces its receiver’s payoff, which is known only to potential liar. Even though all reduction amounts are equiprobable, ex-post beliefs elicited from senders suggest that, unlike truth-tellers, most liars underestimate the extent of the actual reduction in the receiver’s payoff and appear to exploit this self-serving bias, resulting in substantially more lying relative to a baseline treatment without the uncertainty. Subsequent treatments confirm the bias by either providing additional evidence or by removing possible confounds. An intervention treatment nudging senders toward correcting the bias reduces lying.

• **Tobias Gesche.** ‘Honesty in the Digital Age.’

  **Authors:** Alain Cohn, Tobias Gesche and Michel Maréchal

  **Abstract:** Modern communication technologies enable efficient exchange of information, but often sacrifice direct human interaction inherent in more traditional forms of communication. This raises the question of whether the lack of personal interaction induces individuals to exploit informational asymmetries. We conducted two experiments with 866 subjects to examine how human versus machine interaction influences cheating for financial gain. We find that individuals cheat significantly more when they interact with a machine rather than a person, regardless of whether the machine is equipped with human features. When interacting with a human, individuals are particularly reluctant to report unlikely favorable outcomes, which is consistent with social image concerns. The second experiment shows that dishonest individuals prefer to interact with a machine when facing an opportunity to cheat. Our results suggest that human interaction is key to mitigating dishonest behavior and that self-selection into communication channels can be used to screen for dishonest people.
• Georgia Michailidou. ‘Interdependent Lying Costs: Theory and Experimental Evidence.’

Authors: Colzani Paola, Georgia Michailidou, Luís Santos-Pinto

Abstract: We use a theoretical model to consider interdependent lying costs. That is, whether individuals’ decision to lie in a deception game differs in environments where i) individuals act alone, ii) individuals observe others’ decision to lie, iii) individuals form beliefs about others’ decision to lie. The model projects a number of equilibria depending on whether lies are substitutes (individuals lie less when they observe/believe others lie), or complements (individuals lie more when they observe/believe others lie). Then, we use a lab experiment with multiple treatment variations to document any empirical manifestation of lying costs interdependency and whether sequential play generates more lying than simultaneous play.

Session Topic: Decision Theory (Room 004)

• Anthony Newell. ‘Weighting for a refined prospect.’

Authors: Anthony Newell & Lionel Page

Abstract: It is well established that individuals tend to overweight small probabilities while under-weighting large ones, producing an “inverted-S” shaped probability weighting function. Traditionally in studying this area the two most common forms of presenting lotteries are through either a written statement of the outcomes, or through a visual representation of the outcome, usually in the form of a pie chart. In both cases the lotteries usually have only two outcomes. We investigate if the use of more granular (noisy) statistical information will increase probability weighting errors. In an experimental setting participants are asked to choose between lotteries pairs which have between three and six outcomes. Using a within subject treatment the presented lotteries have a probability granularity of either chances in six or chances in 20. We hypothesis that the more granular lottery (chances in 20) will have a less linear probability weighting function due to the non-stochastic noise in their presentation.
• **Despoina Alempaki.** ‘Preference Reversals under Strategic Uncertainty.’  
**Authors:** Despoina Alempaki, Graham Loomes  
**Abstract:** The “preference reversal phenomenon,” a systematic disparity between people’s valuations and choices, poses a fundamental challenge to the usual assumptions of well-defined preferences. To date, the numerous works that have examined preference reversals involve risky or ambiguous gambles in non-interactive environments. However, in many important economic, political and social situations uncertainty is strategic and arises from the difficulty of predicting other agents’ actions. In this paper we investigate: (i) whether preference reversals still occur under situations of strategic uncertainty and (ii) if so, how they compare to preference reversals under non-strategic settings. Our results show that preference reversals are robust to environments of strategic uncertainty.

• **Bachir Kassas.** ‘Happy to Take Some Risk: A More Accurate Assessment of the Dependence of Risk Preferences on Mood.’  
**Authors:** Bachir Kassas, Marco A. Palma, Maria Porter  
**Abstract:** There is a vast literature on the effect of mood on individual risk preferences with two main hypotheses. While the mood maintenance hypothesis (MMH) predicts increased risk-aversion with positive mood and vice versa (Isen and Patrick, 1983; Arkes et al., 1988; Mano, 1992; Nygren et al., 1996; Rusting and Nolen-Hoeksema, 1998; Kring, 2000), the affect infusion model (AIM) carries an opposite view (Lerner et al., 2004; Kugler et al., 2012; Spies et al., 1997; Nguyen and Noussair, 2014). In this study, we utilize facial expression analysis technology in order to provide a more accurate investigation of the effect of induced mood on risk preferences. Moreover, we test for a dilution effect which we conjecture is present in the three-stage experimental design that is commonly adopted when tackling this question. We apply two popular risk preference elicitation tasks constructed by Holt-Laury (HL) and Eckel-Grossman (EG) in order to examine potential differences in treatment effects across tasks. We find strong evidence that positive mood stimulates more risk-seeking behavior.
This result was consistent across risk preference elicitation methods, although it was more pronounced in the HL task. Furthermore, this result only became apparent when considering the undiluted group of individuals, who did not follow the conventional three-stage design and did not have their induced mood diluted prior to reporting their risk preferences. As for the effect of negative mood, it was more task-dependent. While undiluted individuals displayed slightly more risk-seeking behavior in the HL task, no effect was found in the EG task. We conclude that the results are more supportive of the AIM, with weak evidence favoring the MMH in the negative mood domain. Furthermore, we argue that the divergent results found in the literature might arise from the issues inherent in the conventional mood measurement methods and differences in the risk preference tasks used to measure risk preferences.

• **Yohanes Eko Riyanto.** 'Halo Effect in Human-Robot Interaction: How Chatbot Influences Human Decision Making Under Risk.'

**Authors:** Yunfeng Lu, Yohanes Eko Riyanto, Xing Zhang, Georgios Christopoulos  

**Abstract:** Chatbot, an artificial intelligence robot conducting conversation with human, becomes increasingly popular in contemporary websites and applications. There is little evidence documenting how this conversational robot affects human’s judgment and decision making. In this study, we investigate the role of chatbot interface in people’s risk decision making in a cost-loss game using lab experiments. The robot’s role is to give advice to the human decision maker whether to take a risk of a loss or pay a cost to avoid the risk. Before the start of the economic game, the decision maker can have a 5 minutes’ chat with the robot. We exogenously manipulate the quality of chat between human and robot in a novel experimental system, and find that participants’ subsequent decision to follow the robot’s advice or not is systematically influenced by the chat quality. In addition, we find that this influence of chat quality on human decision is mainly due to people’s perceived intelligence of the robot, rather than emotions or social distance. These findings are consistent with the halo effect that people overly rely on the robot’s intelligence in chatting to infer its competence in giving economic advice.
Session Topic: Field Experiments (Room 005)

- **Tomomi Tanaka.** ‘The relationship between conflicts, economic shocks, and death with depression, economic activities.’

**Authors:** Julian Jamison, Kevin Robert McGee, Gbemisola Oseni, Julie Perng, Ryoko Sato, Tomomi Tanaka, Renos Vakis

**Abstract:** This paper examines the links between adverse events, depression, and decision-making in Nigeria. It investigates how events such as conflicts, shocks, and deaths can affect both short-term perceptions of welfare, as well as longer term decisions on economic activities and human capital investments. First, we find that exposure to conflict has the largest and strongest relationship with depression, associated with an 88 percent increase in the probability of reporting depressive symptoms. This is the equivalent of a reduction in income by around $34 USD (4.4 percent of the average income of households in this sample). Second, we randomize the timing of the shocks module with respect to the mental health one. We find that individuals who were reminded about their history of adverse events have a 10 percent higher probability of reporting depressive symptoms. Our final sets of results show that depression is associated with lower labor force participation and child educational investment. People with depressive symptoms are 8 percent less likely to work; this is driven by a reduction in engagement in agricultural activities for men and self-employment for women. In addition, households with a parent exhibiting depressive symptoms spend 20 percent less on education. These results are suggestive of a direct link between mental health, welfare perceptions and decision-making, beyond the indirect one that can come via exposure to adverse effects.

- **Klarizze Puzon.** ‘Regional identity and intergenerational resource conflict: an experiment in Guinea.’

**Authors:** Klarizze PUZON, Ruth TACNENG, Thierno BARRY, Marc WILLINGER

**Abstract:** We examine the impact of regional fragmentation and ethnicity on behavior in an intergenerational game of non-renewable resource extraction. The dynamic game has a new generation of players every period. It is characterized by shocks endogenously caused by players’ extraction decisions. After a given threshold, the resource suddenly drops to lower values. We present a two-player, framed field experiment on a sample of
Fulani (ethnic majority group) and Malinke (minority group) participants in Guinea-Conakry, Sub-Saharan Africa. We frame instructions in the context of bauxite, the natural resource that Guinea’s economy is heavily dependent on. Our main treatment variable is the ethnically-inclined region of origin of the two players. Preliminary results suggest that regional fragmentation significantly affects the behavior of the majority group, the Fulani. Across time, Fulani tribal members tend to choose lower extraction rates, are less likely to deplete the resource, and thus implicitly more concerned of future generations. This is more prevalent when they are paired with a player of the same social identity as theirs.

• **Nicholas Haas.** ‘Improving Women’s Access to Justice in a Context of Legal Pluralism: Two Experiments on Short and Long-term Approaches in Somalia.’

**Authors:** Nicholas Haas, Prabin Khadka

**Abstract:** States with high-functioning formal institutions perform better on a wide range of outcomes and offer particular promise for vulnerable populations, such as women, that face bias from traditional informal institutions. But building strong formal institutions can take decades, and in recent years scholars and policymakers have sought to provide individuals with access to justice through improvements to informal institutional alternatives. In Somalia, formal courts that offer a mix of secular and Islamic (Sharia) law coexist alongside two alternatives: courts run by Islamist militant group al-Shabaab that enforce a strict brand of Sharia law, and dispute resolution bodies led by traditional clan and religious elders. We ask and seek to answer two questions in this context of legal pluralism. First, what can be done to increase access to justice for women in the short-term? We conduct a randomized controlled trial to evaluate whether a United Nations program that provides alternative Quranic interpretations and non-violent communication training to women and traditional leaders changes attitudes and norms about women and gender-based violence, and improves informal institutional responsiveness to women. Second, what can increase usage of formal institutions, particularly by women, in the long-term? We conduct a conjoint experiment across 40 districts with over 600 subjects to evaluate what leads individuals to seek adjudication of disputes by al-Shabaab, the central obstacle to the establishment of the rule of law, and not formal courts or traditional elders.
• Lamis Saleh. ‘Punishment Patterns, Violence, and Distress among Syrian Civil War Victims in Syria: A Lab-in-the-Fi.’

Authors: Nora El-Bialy, Elisa Fraile Aranda, Andreas Nicklisch, Lamis Saleh, Stefan Voigt

Abstract: Since the year 2011, a brutal civil war has been taking place in Syria. An uncounted number of people is internally displaced or have fled the country. Although participants differ in the area where they reside in Syria, the vast majority of them have experienced severe violence on a daily basis. We ran a series of online and lab-in-the-field experiments with Syrians in Syria- both in government controlled and uncontrolled areas- and with Syrian refugees who escaped the civil war to Jordan. We test their pro-social and cooperative behavior in sequential modified prisoners’ dilemmas and modified ultimatum games. We identify unusual punishment schemes responding to breaches of pro-sociality and cooperativeness. Participants with more exposure to violence are more likely to depict unconditional punishment harshly.

Session Topic: Discrimination (Room 006)

• Graeme Pearce. ‘Discrimination in British Carvery Restaurants.’

Authors: Brit Grosskopf and Graeme Pearce

Abstract: We present a natural field experiment designed to examine price discrimination in British carvery restaurants. Carvery restaurants serve traditional British roast dinners, and are characterised by the manner in which customers are served: a single chef serves every customer individually and, under observation, cuts them a portion of meat from a roasted joint. We employed 147 testers to pose as customers, each of which paid the same price for an identical meal. We find systematic variations in served meat quantities that correlate with the testers’ gender, with men receiving significantly more meat than women. However, this disparity is almost entirely explained by variation in the testers’ height. Evidence from a complementary framed field experiment highlights how female willingness to pay is highly sensitive to information about the disparity, whilst males are unaffected.
Kristine Koutout. ‘Second-Order Beliefs and Gender in the Lab.’

Authors: Andrew Dustan, Kristine Koutout, Greg Leo

Abstract: Sometimes, men and women are different. More often, people believe men and women are different, and these beliefs affect decisions. For example, an engineering professor who believes that men are better than women at technical research may invest more time into advising male graduate students. A manager who believes that men are tougher negotiators may give men raises more frequently. Beliefs about others’ beliefs about men and women may also affect outcomes. For example, a woman may choose not to pursue engineering because she believes that professors believe that men are better than women at technical research (and thus invest less time in women). She might also refrain from requesting raises if she thinks her manager believes women are weak negotiators. The existence of these second-order beliefs may lead to uneven outcomes, even if the beliefs are not accurate. Thus, second-order beliefs may be an important source of unequal economic outcomes. We provide the first direct measurements of second-order gender beliefs using a lab experiment and find that, while a majority of people believe men and women differ in a math task and a bargaining task, their second-order beliefs are distorted (with respect to true first-order beliefs of others) in ways that may perpetuate these differences. Our lab experiment considers two separate tasks. In the first task, subjects are asked to add sets of five two-digit numbers. In the second task, an abstract bargaining environment, individuals choose their minimum acceptable offer in an ultimatum game. There are three phases of the experiment. In the “primary task” phase several participants completed the two tasks. In the first-order” beliefs phases, participants are incentivized to reveal their beliefs about how men and women performed in the primary task phase. In the “first and second-order” beliefs phases, participants are incentivized to reveal both their first-order beliefs about how men and women performed in the primary task phase (first-order beliefs) and also their beliefs about what men and women reported in the first-order belief phase (second-order beliefs). This final stage provides the data for our analysis. An important design feature in our experiment is that participants are always asked to reveal their beliefs about participants who are not in their session. This eliminates judgments based on any observables besides gender. To incentivize subjects’ belief elicitation we use the binarized scoring rule with a payoff function that is proper for the median. This
elicitation is incentive-compatible for subjects’ median beliefs regardless of risk preferences. The experiment was conducted at the Vanderbilt Experimental Economics Lab (VUEEL) in November 2017 - January 2018. 80 men and 77 women participated and earned an average of $18.09 for participating in sessions of roughly 30 minutes. We find strong evidence that a majority of people believe that a majority of men believe that men will outperform women on the math task. In sharp contrast, participants have widely varying beliefs about women’s estimation of men’s and women’s relative math ability. Second order beliefs with respect to the ultimatum game are more consistent. We find evidence that majority of people believe that both a majority of men and a majority of women believe that men choose a higher minimum acceptable offers in the ultimatum game. We also quantify the distortion between first order and second-order beliefs and find that participants tend to overestimate the extent to which men’s beliefs “favor” men and underestimate the extent to which women’s beliefs “favor” men. By identifying these (distorted) second-order beliefs about gender in the lab, we have taken a first step toward quantifying the role that higher-order beliefs about gender differences play in markets and strategic interactions. Our paper also provides a useful methodological contribution in establishing a well-controlled method to elicit second-order beliefs. This methodology may be used for studying beliefs about a wide variety of characteristics and behaviors where those beliefs may play an important role in determining divergent gender outcomes.

- Jing Li. ‘Gender-biased task assignment: Evidence from a laboratory experiment.’

Authors: Jing Li, Patrick McGuire

Abstract: We ask whether men receive lucrative tasks more often than equally capable women so that a gender pay gap arises due to the difference in the earnings potential. Our subjects allocate a standard task and a challenging yet lucrative task between two workers, knowing each worker’s past performance, task preference, and sex. We find that men receive the lucrative task more often than women, but the difference can largely be explained by past performance and a gender difference in task preference. A large fraction of workers shies away from the lucrative tasks, suggesting that the subjects may incur a psychic cost when the tasks are challenging. The gender difference in task preference leads to a gender
difference in the earnings potential. Managers choose the efficient task allocation less often when the workers’ preferences go against rather than with their money-incentive. The result suggests that managers show concern for the subjective utilities of the workers.

- **Francisco Lagos.** ‘Obesity Discrimination in Hiring: a natural field experiment.’

**Authors:** Francisco Lagos, Catarina Goulao, Juan A. Lacomba, Dan Olof-Rooth

**Abstract:** This article regards the discrimination of overweight and obese individuals in the labor market. Our objective is twofold. First, we aim to quantify the degree of discrimination towards the overweight and obese individuals in the labor market. Second, we aim to shed some light on the mechanisms driving such discrimination. Understanding the mechanisms responsible for obesity discrimination is absolutely necessary in view of advising the relevant policy recommendations. In the absence of appropriate data, we will rely on a field experiment, designed specifically for our purposes.

Specifically, and following Riach and Rich (2002), pairs of equal fictitious applications have been sent to real job openings advertisements. They will be identical in all relevant employment characteristics, except in one characteristic: photo, one obese and the other of normal weight. Also, we want to understand how social norms concerning obesity may affect discrimination. To this end we will carry out our field experiment in different European regions that capture diverse social norms as regards obesity.

In particular, we will verify the existence or not of discrimination due to obesity in the processes of contracting the labor market. The results of the same, in addition, will allow us to make international and interregional comparisons between and within four important European countries. Finally, the results might contribute a better understanding of the mechanisms that lead to discrimination in the hiring of obese people, and thus could contribute to a more effective design of the policies that fight against labor discrimination, an issue that affects an increasingly large part of the population.
Session Topic: Preferences (Room 009)

• **Zeeshan Samad.** ‘Trust and Treachery in Genetic Data Privacy.’
  
  **Authors:** Zeeshan Samad, Myrna Wooders, Bradley Malin, Eugene Vorobeychik
  
  **Abstract:** Given that individuals are concerned about misuse of their genetic data, do they feel that the overall benefit from a genetic test is greater than its harms? We elicit people’s concern about privacy of their genetic data and their motivations for sharing their genetic data. Our experiment uses framing effects to test if people are willing to risk the privacy of their genetic data to get a health benefit. Since this decision can depend on individual-level characteristics, we compare this outcome with an identical problem but framed differently; that problem tests if people are willing to risk their financial data privacy to get a monetary benefit. We use a four-treatment experiment design to decompose the different factors that motivate people to risk their genetic (or financial) data for a health (or monetary) benefit. The results from our experiment suggest that individuals are more willing to risk their genetic data privacy for a health benefit than they are willing to risk their financial data privacy for a monetary benefit.

• **Xiu Chen.** ‘How time flies!’
  
  **Authors:** Xiaojian Zhao, Xiu Chen
  
  **Abstract:** This paper points out a potential identification problem of time preference elicitations: the observed intertemporal decisions could be driven by a biased perception of time, and thus may not completely reveal the true time preference. To test this conjecture, we explore the relationship between time perception and the observed intertemporal choices by conducting a laboratory experiment, in which cognitive load is used as an instrument to manipulate time perception. We find that the perceived time lengths for subjects with high cognitive load are shorter than those with low cognitive load. Moreover, there is a correlation between time underestimation and observed patience. Lastly, the results support that time perception mediates part of the cognitive load’s effect on intertemporal choices.
• **Dominik Duell.** ‘Shared Social Identity and Strategic Uncertainty.’

**Authors:** Dominik Duell, Catherine Hafer, Dimitri Landa

**Abstract:** Extensive research on social identity suggests that when individuals encounter somebody who shares their group identity, they make inferences about that person's attitudes that typically assume greater similarity to their own attitudes. Little is known, however, whether and how such attributions operate in the context with strategic uncertainty. This study induces group identities and then places individuals in a standard decision situation featuring strategic uncertainty (stag hunt game). We find that behavior in the stag hunt game is robustly identity-match contingent: in in-group matches, individuals are more willing to take payoff-dominant (riskier) choices. We show that these results are not explainable by individuals' beliefs about the risk preferences of members of their own vs. of the other social group, but are influenced by individuals' pre-game experience with the identity group. We argue that social identity matching affects individuals’ strategic uncertainty and that that conclusion provides an alternative explanation for the own-group favoring affect and trust behavior in strategic settings. Our results call for a re-assessment of the standard accounts of such behavior.

• **Alice Solda.** ‘Strategically Delusional’

**Authors:** Solda A., Ke C., Page L. and W. von Hippel

**Abstract:** We investigate the idea that overconfidence emerges as a strategy to gain an advantage in social interactions. We design an experiment where participants complete a general knowledge test and are then incentivized either to form accurate beliefs about their performance, or to convince a group of other participants that they performed well. We also vary the participants’ ability to freely gather information about their performance. Our results are consistent with the idea of strategic confidence. First, participants are more likely to become overconfident when they anticipate that they will benefit from convincing others about their performance. Second, in such situations, they tend to actively engage in biased information gathering in a way conducive to generating overconfident beliefs.
DAY 2

Friday, January 25
Nikos Nikiforakis. ‘Motherhood and the willingness to compete for pay.’

Authors: Aurelie Dariel, Curtis Kephart, Nikos Nikiforakis & Christina Zenker

Abstract: There is a large disparity in the labor market outcomes of mothers and non-mothers around the world. Although this so-called ‘motherhood gap’ accounts for a substantial, ever-growing fraction of the overall gender gap, its causes are not fully understood. We argue that evolutionary and social forces are likely to have affected negatively the willingness of women to compete for pay after they become mothers. Given the importance of competition in modern labor markets, if mothers are less willing to compete for pay than non-mothers, it could help explain some of the motherhood gap. We test our hypothesis in two experiments, using samples from two very different cultural backgrounds. In both studies, mothers are found to be less willing to compete than non-mothers. This difference cannot be explained by differences in their ability, risk attitudes, beliefs, family background or marital status. Survey evidence and matching analysis suggest there is a causal link between motherhood and the willingness to compete for pay. We also find support for the another hypothesis that fathers are not less willing to compete for pay than non-fathers. These findings have important implications for policies designed to reduce both the motherhood and the gender gap.

Ernesto Reuben. ‘Competitiveness and the gender gap among young business professionals.’

Authors: Ernesto Reuben, Paola Sapienza, Anna Toldra, and Luigi Zingales

Abstract: Important gender differences in earnings and career trajectories persist. Particularly, in professions such as business. Gender differences in competitiveness have been proposed as a potential explanation. Using an incentivized measure of competitiveness, this paper investigates whether competitiveness explains future gender differences in earnings and industry choice in a sample of high-ability MBA graduates. We find that competitive individuals earn 9% more than their less competitive counterparts do upon graduation and this difference explains around 10% of the overall gender gap. However, the effect of competitiveness on earnings is considerably reduced nice years later while the overall gender gap increased.
• Barbora Baisa. ‘Group Membership, Team Payoff and Gender Competitiveness.’

Abstract: Nowadays, women represent a larger percentage of positions in political life and private sector than ever before. Nevertheless, they still remain underrepresented in the leading positions of political systems and corporations. Also, the percentage of women in the political life is still relatively low. The lack of women in government, positions of presidents and prime ministers or other leading functions at all can be partly explained by their lower willingness to enter a competition in comparison with men. Further to the studies showing that women are equally skilled, educated and productive, the question arises how to encourage qualified and high-performing women to compete. The analysis of the information gathered via conducted laboratory experiment shows that inducing a team identity (group membership) and team payoff increases competitiveness of high-performing women without loss of willingness to compete of high-performing men. In addition, no significant (neither positive nor negative) change in the performance among both men and women was found.

• Hirofumi Kurokawa. ‘Ingroup Bias and Willingness to Compete.’

Authors: Hiroko Okudaira, Yusuke Kinari, and Fumio Ohtake

Abstract: We conduct an experimental study to investigate the impact of group identity on men and women’s willingness to compete. First, subjects’ identities are artificially induced by the minimal group paradigm. A paired competitor is randomly assigned. Some subjects are paired with the same identity competitor (ingroup) and the others are paired with the different identity competitor (outgroup). Second, subjects perform a real effort task under a piece rate and then under a competitive tournament. Subjects can then choose which compensation scheme to apply in the next round. We find that men are more willing to compete against the outgroup competitor than the ingroup competitor, while women are not willing to compete against the outgroup competitor as well as the ingroup competitor. The reason why men are more willing to compete the outgroup competitor is that men increase performance and become more overconfidence if the competitor is outgroup.
Session Topic: Markets (Room 004)

- **Jacopo Magnani.** ‘Limited strategic thinking and the cursed match.’

  **Authors:** Jacopo Magnani, Olivier Bochet

  **Abstract:** In marriage and labor markets, information about the attributes of the parties involved is often private. Thus, optimal matching decisions require agents to engage in sophisticated strategic thinking. In this paper we use a laboratory experiment to study matching under imperfect information. We analyze subjects’ behavior in a game where being accepted confers bad news about a potential partner’s type. We find that subjects propose to form matches when Bayes-Nash equilibrium predicts they should not. This behavior is consistent with a cursed equilibrium model in which players fail to understand adverse selection and thus overestimate the value of matching. We propose a series of treatments to rule out alternative explanations.

- **Lukas Wenner.** ‘Cursed Buyers in the Marketplace.’

  **Abstract:** It is well known that in many situations, economic agents exhibit limited strategic thinking, in particular when it comes to correctly inferring information from others’ actions. Such inferences, however, are crucial for optimal behavior in markets with asymmetric information and potential adverse selection, because buyers need to understand whether and how prices can be used to make inferences about unknown qualities. This paper applies cursed equilibrium (Eyster and Rabin, 2005) to a model of bilateral trade where sellers set take-it-or-leave-it offers and buyers are uninformed about the product’s quality. Theoretically, I show that this model predicts that (i) all qualities are sold in equilibrium, but the probability with which a product is sold decreases in its quality, (ii) prices increase in quality, and (iii) buyers make losses (gains) when buying below-average (above-average) qualities. I then experimentally investigate these predictions and find support for all three, indicating that cursedness predicts market behavior well in this context. To directly test this explanation based on limited strategic sophistication, I manipulate the degree of buyers’ strategic ability in a given market and show that with low ability buyers, consumer welfare is lower. At the same time, sellers benefit because more naive buyers mitigate effects of adverse selection, since they buy low quality products too often. This provides direct evidence that limited strategic reasoning has detrimental effects on consumer welfare in these markets and that the concept of cursedness organizes behavior remarkably well.
• **Peter Katuscak.** ‘Strategy-proofness Made Simple.’

Authors: Peter Katuscak and Thomas Kittsteiner

Abstract: There is a growing evidence that many people do not report their preferences truthfully in strategy-proof mechanisms. As examples, consider the second-price auction or student-school matching under a strategy-proof mechanism. A leading explanation of this observation is game complexity, manifesting itself through a large number of contingencies that a player needs to consider to see that reporting truthfully is weakly dominant. We propose a novel way of framing any strategy-proof mechanism that aims to reduce the ensuing cognitive load on players. First, a player’s reported type is used to determine opportunity sets of the other players, whereas reported types of the other players are used to determine the opportunity set of the player in question. Second, a player’s private allocation is determined as (one of) the most preferred allocation(s) in her opportunity set according to her reported preference type. We then experimentally test whether this framing increases truthful reporting relative to ‘‘traditional’’ frames using top trading cycles (and plan to do so for deferred acceptance and second-price auction in the near future). We find that the proposed framing increases the rate of truthful reporting by almost one half. Moreover, there is no effect for low numeracy subjects, whereas the rate of truthful reporting more than doubles for high-numeracy subjects.

• **Fuhai Hong.** ‘Concentration and Unpredictability of Forecasts in Artificial Investment Games: An Online Experiment.’

Authors: Xiu Chen, Xiaojian Zhao, Fuhai Hong

Abstract: This paper is the first to use the WeChat platform, one of the largest social networks, to conduct an online experiment of artificial investment games. We investigate how people’s forecasts about the financial market are shaped by the environment, in which they interact before making investment decisions. Our treatments manipulate whether subjects can observe others’ forecasts and whether subjects engage in public or private investment decisions. We find that subjects’ forecasts significantly converge when shared, though in different directions across groups. Thus, information sharing does not necessarily lead to better decisions. We also observe a strong positive correlation between forecasts and investments, suggesting that an individual’s reported forecast is associated with his belief.
Session Topic: Repeated Games (Room 005)

- **Binglin Gong.** ‘Cooperation through Indirect Reciprocity: Impact of Higher-Order History.’
  
  **Authors:** Binglin Gong, Chun-Lei Yang
  
  **Abstract:** How people use acquired higher-order information to aid cooperation decisions is an open empirical question. We conduct a random matching prisoners’ dilemma experiment with optional history information up to the second order, that is, including the action history of the partner’s previous partners. Using our newly defined continuous extension of some well-known reputation scores, we find that standing and judging scores significantly affect the cooperation decision. More than half of our subjects respond to the higher-order scores, and incorporating individual heterogeneity in aggregate regressions greatly improves the overall fit. People learn to use the judging score through their experience of being cheated. The reputation effect is stronger when people have first played the baseline prisoner’s dilemma game without information, whereby subjects are more cooperative when both parties display high reputation scores. Moreover, the level of information-induced improvement in cooperation is significantly lower in the control treatments where only first-order information is provided.

  
  **Authors:** Wieland Müller, Melis Kartal
  
  **Abstract:** The theory of infinitely repeated games lacks predictive power due to equilibrium multiplicity and its insensitivity to, for example, changes in certain parameters, the timing of players’ moves or communication possibilities. We propose a new approach, which mitigates the shortcomings of the theory. In particular, we study a standard infinitely repeated prisoner’s dilemma game and its variants with (i) heterogeneous tastes for cooperation, and (ii) strategic risk arising from incomplete information about the opponent’s taste for cooperation. We theoretically show that the variants we study reduce strategic risk and boost cooperation and coordination on cooperation relative to the standard game, unlike what a theory based on pure material self-interest of players would predict. Our theoretical results are corroborated by the results of our experiments.
**Maoliang Ye.** ‘Does Gradualism Build Cooperation? A Finitely Repeated Investment Experiment.’

**Authors:** Xiangting Hu, Maoliang Ye

**Abstract:** This paper examines the effect of gradualism in increasing the stake of investment slowly over time rather than requiring a high stake of investment immediately in co-operation building using a finitely repeated binary trust (investment) experiment. The experimental results find that gradualism helps build high-stake cooperation in the investment relationship: The gradualism treatment has a higher initial reciprocation rate of the trustee, which leads to higher rates of subsequent investment from the trustor and successful mutual cooperation among the trustor and the trustee. However, the rates of investment, reciprocation and mutual cooperation for all treatments sharply decrease in the end (“end-of-game” effect). Our results are consistent with a behavioral game theory model, but not with the standard game theory predictions.

**Andrea Isoni.** ‘Trust and Mutual Benefit.’

**Authors:** Andrea Isoni, Robert Sugden, Jiwei Zheng

**Abstract:** We conduct an experiment in which randomly-formed pairs of participants face repeated opportunities to enter anonymous transactions framed as sales of abstract pictures. Transactions may result in financial benefits to either or both parties, depending on the random realisation of the exchange price, the charge to deliver the picture, and the benefit to the receiving party. Entering a transaction is voluntary, and based on knowledge of the exchange price and delivery charge for the seller, and of price and benefit for the buyer. The transaction is either executed simultaneously, or in a sequence that commits the first mover to sustain a cost (either the delivery charge if the seller moves first or the exchange price if the buyer moves first), exposing them to a loss if the second mover does not complete the transaction, as in a binary trust game. By manipulating the frequency with which transactions are executed simultaneously, we study whether more frequent exposure to the mutually beneficial simultaneous transactions increases trust and trustworthiness when the execution of transactions is asynchronous.
Session Topic: Social Preferences (Room 006)

• **Romain Gauriot.** ‘Altruism or Diminishing Marginal Utility?’

  **Authors:** Romain Gauriot, Stephanie Heger, Robert Slonim

  **Abstract:** We challenge a commonly used assumption in the literature on social preferences and show that this assumption leads to significantly biased estimates of the social preference parameter. Using Monte Carlo simulations, we demonstrate that the literature’s common restrictions on the curvature of the decision-makers utility function can dramatically bias the altruism parameter. We show that this is particularly problematic when comparing altruism between groups with well-documented differences in risk aversion or diminishing marginal utility, i.e., men versus women, giving motivated by pure versus warm glow motives, and wealthy versus poor.

• **Stefania Bortolotti.** ‘Hope and Anger: An Experiment on Inequality and Disruptive Behavior.’

  **Authors:** Maria Bigoni, Stefania Bortolotti, Efsan Nas Ozen

  **Abstract:** The extent of inequality is a decisive factor in fuelling social unrest, but not all inequalities are born alike. By means of a laboratory experiment, we investigate how the unequal distribution of monetary payoffs can trigger disruptive behavior against people with whom there is no previous or expected future contact. In particular, we study whether disruptive behavior depends on the levels of inequality only, or conditions through which inequality occurs plays a role. To do so, we compare an environment in which reducing inequality is safe for the rich with one in which reducing inequality puts the rich in a vulnerable position. We find that inequality triggers the poor’s disruptive behavior towards rich strangers, and that the experience of the same level of inequality leads to a higher degree of frustration and disruptive behavior among the poor, in the former, as compared to the latter environment. This behavioral change appears to be driven by a change in the poor’s expectations on the behavior of the rich, which are more optimistic when the rich can safely reduce inequality.
• Pierluigi Conzo. ‘Was Banfield right? New insights from a nationwide laboratory experiment.’

Authors: Arnstein Aassve, Pierluigi Conzo, Francesco Mattioli

Abstract: The north-south gap in social capital has marked Italy as a worldwide example of within-country differences spurring socio-economic diversity. External validity and measurement issues in previous studies raise doubts about whether differences in social capital reflect indeed a ‘national syndrome’. Representative data from our nationwide lab-experiment show northerners perform better only in trustworthiness, but they are similar to southerners in cooperation, trust, beliefs, altruism and risk tolerance. As a novel result, the south reciprocates less when the amount at stake increases, suggesting the north-south divide is preference-based and sustained by a social norm that hinders southerners from rewarding pro-social acts.

• Topi Miettinen. ‘Revealed Preferences in a sequential prisoners’ dilemma: a horse-race between six utility functions.’

Authors: Topi Miettinen, Michael Kosfeld, Jörgen Weibull, Ernst Fehr

Abstract: We experimentally investigate behavior and beliefs in a sequential prisoner’s dilemma. Each subject had to choose an action as first-mover and a conditional action as second-mover. All subjects also had to state their beliefs about others’ second-mover choices. Using the elicited beliefs, we use a novel and intuitively appealing hit-rate approach to compare the explanatory power of a few current models of social and moral preferences. The data show clear differences in explanatory power between the preference models, both without and with control for the number of free parameters. The best-performing models explain about 80% of observed behavior. We also compare the results with a conventional maximum-likelihood method, and conclude that results by and large agree. We finally use the estimated preference parameters to identify biases in subjects’ expectations. We find a consensus bias (whereby subjects believe others behave like themselves) and a slight optimism (whereby subjects overestimate probabilities for favorable outcomes).
Session Topic: Decisions under Risk (Room 009)

- **Bodo Vogt.** ‘Hysteresis and prospect theory - A model and its experimental evaluation for order effects.’

  **Authors:** Stephan Schosser, Judith Trarbach, Bodo Vogt

  **Abstract:** Evaluating two experiences of different events is not only difficult from a practical perspective, but it is also challenging from a theoretical viewpoint. Prospect Theory, Peak-end Rule, and primacy effects are approaches which exist to predict the behavior of a decision maker. This paper introduces a model, which is based on Prospect Theory and hysteresis, that can predict both peak-end rule and primacy effects. In addition, we describe an experimental study that shows how both effects, as predicted by our model, occur.

- **Marc Willinger.** ‘Consumption smoothing and subjective discounting under background risk.’

  **Authors:** Mickaël Beaud, Marc Willinger

  **Abstract:** We provide experimental evidence about wealth allocation decisions between two portfolios available at two distinct dates, the sooner date 1 (with interest rate r1) and the later date 2 (with interest rate r2≥ r1), in the presence/absence of a multiplicative mean-zero background risk (BR). The BR multiplies by a factor 2 or 0 the wealth level with equal probability. We consider four situations: no background risk (BR0), background risk at the sooner date (BR1), background risk at the later date (BR2) and background risk at both dates (BR12). Following Andreoni and Sprenger (2002), we vary the delay between the two dates and the interest rate. Each subject had to make 15 budget allocations for each situation (5 pairs of interest rates combined with 3 pairs of dates). We replicate some of Andreoni and Sprenger’s (2002) findings. Let α0 be the fraction of a subject’s endowment invested under BR0 in the sooner available portfolio. Likewise let us define α1, α2 and α12, the fraction of the endowment invested in the sooner available portfolio under BR1, BR2 and BR12, respectively.

  We categorize subjects according to their response to background risk with respect to α0. 31.5% are categorized as risk-seekers as they increase (decrease) their sooner consumption under BR1 (BR2), i.e. α2 < α0 < α1. 25% are risk-avoiders as they decrease (increase)
their sooner consumption under BR1 (BR2), i.e. $\alpha_2 > \alpha_0 > \alpha_1$. 26.5% are soon-seekerLate-avoiders since they increase their sooner consumption under BR1 and BR2, i.e. $\alpha_1 > \alpha_0$ and $\alpha_2 > \alpha_0$. Finally, 3% are categorized as soon-avoider-late-seekers since they decrease their sooner consumption under BR1 and BR2, i.e. $\alpha_1 < \alpha_0$ and $\alpha_2 < \alpha_0$. The remaining ones (14%) cannot be categorized. Only the preferences of risk-avoiders are compatible with the DEU (Discounted Expected Utility) model which relies on the assumption of stable risk and time preferences. Furthermore, concavity of the utility function under DEU both reflects risk-aversion and preference for consumption-smoothing. We suggest that most subjects have changing risk and/or time preferences and that such preferences are better captured by models that allow to disentangle risk preferences from time preferences, such as Kreps & Porteus (1978) or Epstein & Zin (1989).

• Sebastian Schneider. ‘Higher Order Risk: An Application To Savings of the Poor in Bogota.’

Authors: Marcela Ibañez, Gerhard Riener, Sebastian O. Schneider

Abstract: Higher order risk preferences play an important role in economics, most prominently in the theory of saving under uncertainty. Leland (1968) suggests that under uncertain income prudent individuals increase savings as a precautionary measure. To test this proposition we present a new experimental method to elicit higher order risk preferences. The method we propose uses a non-parametric estimation of the utility function using P-splines. Using this method we can compute well-known theoretically derived measures of the intensities of prudence and risk aversion. We find comparable results to earlier studies with respect to classification of individuals as prudent or imprudent among a sample of poor households in Bogota. In addition, the results strongly support the theoretical prediction that uncertainty leads to increases in savings for prudent individuals. This suggests that this population group lacks alternative options to smooth consumption.

Authors: Jonathan Chapman; Erik Snowberg; Stephanie Wang; Colin Camerer

Abstract: We introduce DOSE - Dynamically Optimized Sequential Experimentation - and use it to estimate individual-level loss aversion in a representative sample of the U.S. population (N = 2,000). DOSE elicitations are more accurate, more stable across time, and faster to administer than standard methods. We find that around 50% of the U.S. population is loss tolerant. This is counter to earlier findings, which mostly come from lab/student samples, that a strong majority of participants are loss averse. Loss attitudes are correlated with cognitive ability: loss aversion is more prevalent in people with high cognitive ability, and loss tolerance is more common in those with low cognitive ability. We also use DOSE to document facts about risk and time preferences, indicating a high potential for DOSE in future research.

Session Topic: Bounded Rationality (Room 001A)

• Daniela Di Cagno. ‘Learning to Avoid Sub-optimality: Experimental Evidence of Intermediate Advice.’

Authors: Noemi Pace, Daniela Di Cagno, Werner Guth

Abstract: For portfolio tasks with a binary chance event optimal choices are corner solutions due to several experimental controls. Previous studies (Di Cagno et al., 2017 and 2018) report overwhelming evidence of suboptimal investments but also that with more experience participants learn to reduce suboptimality. For fifteen parameters constellations, used before and all featuring optimality as corner points of the expected utility curve, participants of the new experiment confront all randomly ordered cases in three successive phases. Advise is provided either between the first and the second or the second and the third phase by alerting participants that lowering the risky investment level can improve success in at least one chance event without harming the success of the other. In the more complex treatment participants also form state-specific success aspirations. Due to incentivization this allows for suboptimal satisficing. Early advice is, as expected, better than later one but less effective with more task complexity. Especially, the reduction of suboptimality in satisficing is minor.
• **Aljaz Ule.** ‘Commitment aversion revisited.’

**Authors:** Arthur Schram, Aljaz Ule

**Abstract:** Many economic and non-economic environments involve long-term commitment. We investigate here how decisions in these environments are moderated by superstition and aversion to commitment. In our experiment, subjects repeatedly choose between similar lotteries, with a unique stochastically dominant choice. Treatments vary in appointing one of the lotteries as a ‘commitment choice’. After choosing this commitment choice, subjects must choose it for the remaining periods of the experiment. The rate of dominant choices significantly drops when such a choice commits, and this is not related to superstitious decisions in the second part of the experiment. We show that designating a commitment option substantially changes subjects’ choices in a way that can only be attributed to an aversion to commitment.

• **Ismael Rafai.** ‘ Revealed Preferences under Stochastic Attention. Characterization, Statistical Test and Experimental Evidence.’

**Abstract:** We propose a thorough test of the model of decision under limited attention proposed by Manzini and Mariotti (2014, Econometrica) and extended by Brady and Rehbeck (2016, Econometrica). In the model, the decision maker chose as if she maximizes a well-defined preference relation over a menu-dependent stochastic consideration set. For this purpose, we provide a new characterization and a new revealed preference theorem that are more adapted to statistical testing. We develop appropriate statistical procedures to test the axioms, to reveal preferences and to measure attention. We conduct a laboratory experiment, based on a “selective attention task”, where participants chose one of the monetary rewards displayed during a short period of time and among numerous distractors. Our results show that most of the subjects behave in coherence with the model. Moreover, the revealed preferences are coherent with the ones induced experimentally.
• Fabien Perez. ‘Self-selection into strategic environments.’

**Authors:** Guillaume Hollard, Fabien Perez

**Abstract:** Nash equilibrium is one of the most commonly used theoretical construct in economics and many experiments have thus been designed to test whether it is a good predictor of the behavior of experimental subjects. Experiments have routinely documented the existence of a substantial fraction of confused subjects who exhibit a rather erratic behavior (e.g. playing dominated strategies) and may thus deviate from Nash equilibrium. The present paper investigates the possibility that confused player may be aware of their own confusion and, as a result, may prefer to avoid playing games they do not feel comfortable with. Since in classical experiments subjects are not offered the possibility to self-select into specific tasks, the possibility that confused players may like to withdraw from certain games remained undetected. We argue that the consequences of self-selection are important. First of all, if confused subjects choose not to participate, deviations from Nash equilibrium will be attenuated. Second, offering the possibility not to participate will bring experiments closer to field situations in which individuals are free to participate, or not, and, hence, enhance the external validity of lab experiments. We here design an experiment which includes the possibility for subjects to choose between a sure payoff and playing a game with the subjects who also self-selected. We find that confused players are indeed more likely to withdraw, leading to a substantial reduction of the gap between empirical observations and theoretical predictions. Furthermore, active players may revise their beliefs to take into account the new composition of the subject pool, an effect which may further reduce the gap between. We however find little evidence that active players are updating their beliefs. Behavioral models were designed to account for bounded rationality in games. We then confront existing models (e.g. Quantal response or level-k) to our data. We find that in their current form, existing models have only a limited ability to account for the kind of behavior induced by self-selection in experimental games.
Session Topic: Cooperation (Room 001C)

• Yu Gao. ‘Unequal past, shared future—Reaching agreement with responsibilities passed by generations.’

Authors: Valentina Bosetti, Ning Liu, Massimo Tavoni, Yu Gao

Abstract: Mitigating global problems such as climate change requires collaboration across countries in spite of overwhelming asymmetries. Countries differ in their historical contribution to the causes of climate change itself, in their vulnerability to its implications, as well as in their ability to pay for mitigation and adaptation. These asymmetries, through the magnifying lens of self-serving bias, have been a major cause of negotiation impasse. Through an experiment, we directly measure the self-serving bias in the context of a collective-risk social dilemma with asymmetric players. We explore beliefs over the fair allocation of contributions and study how this is affected by alternative narratives of historical responsibility. We find that subjects have broadly shared belief on the fair allocation of contributions, where poor and rich alike, contribute the same proportion of their endowment in the veil of ignorance setting. However, their contributions differ in the dictator game. Self-serving bias is measured by the difference in contributions in the setting of veil of ignorance and the dictator game. Overall allocations made by the rich succumb more to the self-serving bias than the allocations made by the poor do. The three framings of historical responsibility (direct responsibility, inherited responsibility and no responsibility) does not affect the belief of fair allocation of contributions, but have different impact on the self-serving bias exhibited in allocations. Under the framing of inherited responsibility, self-serving bias of the rich was eliminated, while that of the poor was amplified, which lead to a more equal society in terms of wealth.

• Jan Frederik Graff. ‘Reviewing and Predicting Cooperation in Prisoner’s Dilemma Games: A Meta-Study.’

Authors: Robert Böhm, Luca Carduck-Eick, Frederik Graff, Christine Harbring, Rebecca Tilkes

Abstract: The prisoner’s dilemma game (PDG) constitutes one of the most intensively studied social dilemma games in social sciences. Previous research has used various parameterizations of the PDG, i.e., the relative differences between the payoffs T, R, P, and S. Although a perfectly selfish-rational actor should not be influenced by such differences, there
is compelling evidence that most people have at least some concern for others and should therefore be sensible to relative incentive differences. Accordingly, previous research proposed several indices that aim to capture the likelihood of players’ cooperative (vs. defective) behavior in different parameterizations of the PDG. These indices have in common that they use the relative size of the payoffs T, R, P, and S to predict players’ inclination to cooperate vs. defect. Yet, the indices differ in the computation and weighting of these parameters and, thus, come to different behavioral predictions. We investigate data from more than 33,000 study participants of 396 independent studies, reported in 147 papers between 1958 and 2017 in order to answer two related research questions: How accurately do different indices predict differences in cooperation vs. defection behavior, and which index performs best? First analyses using weighted normalized payoffs suggest that there are considerable differences in the amount of explained cooperation variance by different indices. Simple indices like R/T show the highest linear correlation with the empirical cooperation rate. This result is confirmed by OLS regressions considering additional control variables (e.g., year of publication, matching procedure, one-shot vs. repeated play). The results indicate that indices matching the actors’ (heuristic) decision processes more closely are better in explaining actual cooperation behavior. Moreover, our findings have value for experimental researchers studying behavior in PDGs to make better predictions about expected cooperation rates in behavioral experiments using the PDG.

• Levent Neyse. ‘Social comparisons in the Public Goods Game.’
Authors: Pablo Brañas-Gar, Elena Molis, Levent Neyse
Abstract: Cumulative evidence in social psychology has shown that social comparisons have strong influences on human behavior and cognition. In this study, we investigate the impact of social comparisons on contribution decisions in the public goods game. Our design consists of four homogeneously formed groups which differ from each other with respect to their marginal per capita return (mpcr) levels. In the control treatments, groups were only aware of their own mpcrs where in experimental treatments high (low) mpcr groups were informed about the existence of low (high) mpcr groups. In line with the typical findings in the literature, contributions increase with the mpcr both with and without information. The results on social comparisons show that when groups with the lowest
mpcr were informed about the existence of groups with the highest mpcr, they decrease their contributions dramatically. Our findings point out that upward social comparisons have a significant impact on contribution decisions when the reference group has a much higher return level.

• Ning Liu. ‘Visions fly and actions follow: Estimation of successors’ actions enhances intergenerational altruism.’

Authors: Ning Liu, Valentina Bosetti, Francis Dennig, Massimo Tavoni, Elke U. Weber

Abstract: One of the challenges posed by the management of many important resources, such as a livable climate and access to safe drinking water, is that sustainability requires each generation to contribute successively to their maintenance. Each generation is both beneficiary of the contribution of its predecessors as well as steward for the maintenance of the resources for its successors. When facing such an intergenerational dilemma, decision makers usually exhibit intergenerational reciprocity, the tendency to repeat the predecessors’ action. Consequently, intergenerational contributions plummet when predecessors stop contributing. This paper identifies a simple behavioral intervention to motivate contributions by decision makers whose predecessors did not contribute. We show that eliciting the decision makers’ expectation of future generations’ generosity considerably increases their own rate of contribution. The decisions of treated decision makers are affected less by intergenerational reciprocity and more by fairness and efficiency considerations, while their altruism attitude remains unaltered. The intervention directs decision makers’ attention to the future and the efficiency of contributing, uncoupling the decision from the perceived injustice of their predecessors’ actions and instead increasing the salience of the impact their own decisions will have on the future.
Parallel Sessions V. (1:30 PM – 3:00 PM)
Session Topic: Political Economy (Room LH007)

**Rebecca Morton.** ‘Social groups, information sharing, and the effectiveness of public protests.’

**Authors:** Marco Battaglini, Eleonora Patacchini, Rebecca Morton

**Abstract:** In this paper we investigate the effect of information sharing in social groups on protest choices theoretically and experimentally. We find that information sharing can lead to individuals making protest decisions based on the experiences of the majority in their group rather than simply their own personal experiences. When citizens protest to reflect the overall experience of their social groups, then their protests can be more effective in conveying information to policy makers, particularly those whose ex ante policy preferences may be significantly different from citizens ‘such that they are not easily persuaded. In this way, information sharing within social groups can result in more informationally efficient protest choices by citizens and to more efficient public policies as a consequence.

- **Lionel Page.** ‘Too big to prevail: Coalition formations in the presence of a superpower.’

**Authors:** Changxia Ke, Florian Morath, Anthony Newell, Lionel Page

**Abstract:** In this study we investigate the effect of players’ power on the formation of coalitions to divide a prize when the assumption that coalition formation involves binding agreements on how to split the prize is relaxed. In our experimental setup with one powerful (‘strong’) player and three standard (‘weak’) players, we vary the strong players voting rights in one dimension and manipulate the timing of agreement and communication on the prize division in the other dimension (i.e., whether binding agreement on prize division and furthermore whether non-binding communication on prize-split intentions at the stage of coalition formation is available). We predict and find: first, with binding agreement, the results of the game and the players average payoff are (surprisingly closely) in line with the relative power of the players as measured by their Shapley value. Second, when binding agreement on the division of the prize is not possible at the stage of coalition formation, the strong player’s likelihood to be part of the
winning coalition and his average payoff stays high if he is not “too strong” but it decreases significantly if his voting rights increase further. Third, communication at the coalition formation stage mitigates this negative effect of the absence of binding agreements for powerful players.

- **Aaron Kamm.** ‘Policy capture by special interests in democracies: The role of revolving doors and post-office employees.’

**Authors:** Jens Großer, Aaron Kamm, Ernesto Reuben

**Abstract:** We experimentally study the role of the revolving door and post-office employment in policy capture by special interests. In our rent diversion game, two politicians compete in a majoritarian election by announcing binding tax policies and special interests can attempt to influence them through unconditional transfers after the election. We observe that (i) the possibility of transfers leads to some policy capture by the special interests; (ii) policy capture increases when special interests and politicians interact repeatedly via the revolving door and, to a lesser extent, when special interests can build a reputation of providing post-office employment to exiting politicians who committed to low taxes while in office; (iii) successful policy capture only arises if proposing low tax rates, in particular when politicians coordinate on doing so, is sufficiently rewarded by the special interests to compensate for the risk of proposing an unpopular policy.
Session Topic: Nudges (Room 004)

- **Henning Hermes.** ‘Motivating Low-Achievers – Relative Performance Feedback in School.’

  **Authors:** Björn Bartling, Alexander Cappelen, Henning Hermes, Marit Skivenes, Bertil Tungodden

  **Abstract:** Across the globe, the use of e-learning software is a fast-growing phenomenon, already in early educational stages. Most of these applications provide rankings or leader boards as motivational tools. However, this relative performance feedback often has negative effects on low-achievers. We suggest a new form of relative performance feedback that scores performance improvements. Using a randomized-controlled trial in primary schools, we show that relative performance feedback on performance improvements substantially increases motivation and performance in math for low-achieving pupils, without hurting high-achieving pupils. This example shows that feedback in e-learning systems could have the potential to reduce inequalities in educational settings by improving motivation and learning outcomes for low-achievers.

- **Haoran He.** ‘Goal setting, effort provision and performance: a field experiment in college physical training courses.’

  **Authors:** Haoran He, Ronghai Su, Qian Weng

  **Abstract:** Goal setting may be a low-cost, scaleable and logistically simple commitment device to help students to self-regulate their behavior, and increase their effort and consequently improve their performance. We investigate the effects of two types of goal setting (i.e., goal set at absolute and relative performance) on effort provision in training and test performance by conducting field experiments in college physical training classes. We exogenously vary whether or not a goal is set and whether or not the goal is set based on knowing one’s ability. We find that goal setting has positive effect on effort provision in training and test performance. This positive effect varies significantly across types of goal setting and across types of students in terms of their ability and various individual preferences through the channel of setting different types of goals. Policy implications are discussed.
• Yu Gao. ‘It’s So Hot in Here: Information Avoidance, Moral Wiggle Room, and High Air Conditioning Usage.’

Authors: Giovanna d’Adda, Yu Gao, Russell Golman and Massimo Tavoni

Abstract: Environmental policies based on information provision are widespread, but have often proven ineffective. One possible explanation for information’s low effectiveness is that people actively avoid it. We conduct an online field experiment on Mechanical Turk and a field experiment on households in China on air conditioning usage to test the theory of moral wiggle room, according to which people avoid information that would compel them to act morally, against the standard theory of information acquisition, and identify conditions under which each theory applies. In the experiments, we observe how exogenously imposing a feeling of moral obligation to reduce air conditioning usage and exploiting natural variation in the cost of doing so, given by outside temperature, influences subjects’ avoidance of information about their energy use impacts on the environment. Moral obligation increases information avoidance when it is hot outside, consistent with the moral wiggle room theory, but decreases it when outside temperature is low. Avoiding information positively correlates with air conditioning usage. These findings provide guidance about tailoring the use of nudges and informational tools to the decision environment.

• Shemal Doshi. ‘Fine as a Nudge: Experimental Evidence.’

Authors: Shemal Doshi and Abhijeet Chandra

Abstract: Fine can be a price but to what extent? More importantly, do fines act as nudges to provoke behavior in long run? In this study, we attempt to answer these questions. Based on the arguments made by Gneezy and Rustichini (2000) who provide evidence against the deterrent hypothesis that suggests that a penalty that leaves everything else unchanged reduces the occurrence of the behavior subject to the fine. In this paper, we empirically examine the model suggested by Lin and Yang (2006) that provides a complementary explanation and qualifies but does not lose the predictive power of the deterrence hypothesis. Employing experimental approach for controlled and uncontrolled groups of graduate students, we explore as to what extent individuals perceive monetary penalty as a deterrent. We examine that the amount of fine, significance
of it’s with respect to the overall payoff, and the type of fine needs to be taken into consideration before generalizing the above hypothesis. Our empirical experimental evidence suggests that the subjects show a higher propensity to comply with the stipulated norm that “they should not avoid the rules” in a peer-influenced environment than when subjected to isolated experiments. Our results further reveal that their tendency to pay fine and get away with the situation is inversely related with the quantum of fine imposed and directly correlated with the frequency of the rule-breaking behavior. These results confirm the findings of Lin and Yang (2006) that penalty should be substantial enough to deter the individuals, rather than just fining them for the sake of penalty. Finally, we argue that the theory of “fine is a price” doesn’t just apply to a single kind of event or model. It can be observed that such trends are also followed up in many another set up too. In case of a multi-step game, we observed that people often tend to go for paying up a penalty if they are going to get the better payoff after subsequent events.

Session Topic: Morals (Room 005)

• Xiangdong Qin. ‘Two-Stage moral behaviors: some evidence from lab experiment.’

Authors: Kun Qian and Xiangdong Qin

Abstract: Moral behavior is an integral part of economic interactions. We conducted a series of lab experiments studying intertemporal choices that conform to different paths of moral regularities. Our experimental findings indicate that “moral consistency” dominates “moral balancing”, and that “moral licensing”, rather than “moral cleansing”, plays a more prominent role in intertemporal moral decision making. Moreover, “moral licensing” is evident in both immediate and delayed sequence of moral choices, but “moral cleansing” is only observed in the immediate sequence of moral behavior treatment. Our experimental results have provided new empirical evidence to the discussion about moral choices over time.
• **Björn Bartling.** ‘Do Markets Undermine Morals?’

**Authors:** Björn Bartling, Ernst Fehr, Yagiz Özdemir

**Abstract:** Some recent experimental papers claim that markets erode moral values. In this paper, we study potential causes for the deterioration of moral behavior in markets. We show that inherent features of market institutions, modeled as a double auction, do not cause the erosion of moral behavior relative to decisions made in a non-market environment, modeled as a choice list. Rather, previously reported differences in moral behavior between these two institutional settings stem from an experimental confound: repeated play in the market context was compared to one-shot play in the non-market context. Second, we show that moral behavior remains robust even in very competitive market environments, where market participants cannot enforce moral market outcomes by refraining from immoral market transactions. Finally, we study the role of social information in market and non-market environments.

• **Wladislaw Mill.** ‘The Normative Perception of Power Abuse.’

**Authors:** David Rojo Arjona, Daniel E. Fragiadakis and Ada Kovaliukaite

**Abstract:** Theories of non-equilibrium strategic thinking (e.g. Level-k and Cognitive Hierarchy) intend to describe how individuals actually behave. But how much of their descriptive accuracy is driven by being more permissive theories? We modify Selten [1991] axiomatic measure of predictive success to ensure individual consistency. By applying restrictions over observables to the individual data (echoing the revealed preference literature), we test the necessary and sufficient conditions of these theories and quantify the economic losses for deviations from the theory. The non-parametric results are favourable for these theories and show that their predictive success is not mechanically due to their permissiveness.

• **Vera te Velde.** ‘Is moral thinking marginal thinking?’

**Authors:** Vera te Velde, Winnifred Louis

**Abstract:** Descriptive norms, which measure the prevalence of moral behavior (“cooperation”) in a population, and injunctive norms, which measure beliefs about the moral imperative to cooperate, are known to be powerful motivators of cooperation. Understanding the channels of
these effects is complicated by the fact that injunctive and descriptive norms are tightly related: descriptive norms provide information about others’ injunctive beliefs, about the costs and benefits of cooperation, and about the likelihood of sanction. Injunctive beliefs, in turn, are affected by the costs and benefits of cooperation and affect sanctioning behavior. We study the psychological underpinnings of normative influence by exogenously changing the relationship between descriptive and injunctive norms. By comparing behavior in games in which higher descriptive norms translate into either higher, lower, or constant marginal social benefit from cooperation (while private costs remain constant) and in which descriptive expectations are exogenously determined to be either high or low, we find that descriptive norms powerfully influence behavior independently of their informational content. This occurs despite the fact that injunctive beliefs are indeed determined more by the costs and benefits involved than the descriptive norms. This reveals a preference for moral conformity that is divorced from the material marginal costs and benefits to cooperation, either private or social.

Session Topic: Peer Punishment (Room 006)

• David Kingsley. ‘Peer punishment, income inequality and incomplete information.’

Authors: Lawrence De Geest, David Kingsley

Abstract: We examine the long-run benefits of peer punishment in public goods games with endowment inequality and incomplete information. Previous work has found that while peer punishment can boost cooperation in the short-run, welfare improvements only come in the long-run. However, endowment inequality requires agreement on contribution norms that reflect differences in wealth, and coordination can suffer if individuals exploit private information about their endowments. We conduct 50 period public goods games with peer punishment. Subjects are placed in groups of four and randomly assigned high or low endowments. Treatments vary whether information about group member endowments is private or public. Preliminary results suggest that groups successfully use peer punishment to enforce beneficial contribution norms when endowments are observed. However, when endowments are unobserved, beneficial norms do not emerge. Data collection is on-going.
• **Agnalys Michaud.** ‘Effectiveness of peer punishment under negative framing.’
  **Authors:** Kate Farrow, David Masclet, Agnalys Michaud, Marc Willinger
  **Abstract:** Given robust evidence demonstrating the effectiveness of peer sanctioning mechanisms in inciting cooperation in positively-framed public good games, we investigate whether peer sanctioning is equally effective in a negatively-framed public good game. We rely on Andreoni’s (1995) experimental design and introduce monetary sanctions in the negative and positive frames. In the absence of peer-punishment we replicate previous findings about the framing effect, i.e. lower group contributions under negative than under positive framing. When peer punishment is feasible, nearly full group cooperation is observed under positive framing. Under negative framing however, average group contributions remain stable around 45%. Slightly more punishment points are inflicted under negative framing. However, we do not observe differences in sanctioning motives between frames: the same determinants of the sanctioning decisions are observed in both frames (negative deviation, positive deviation). We suggest that the lower cooperation observed under negative framing despite the availability of punishment is due to a lower effectiveness of received punishment points than under positive framing.

• **Andreas Nicklisch.** ‘War experience, religiosity, and punishment schemes: Field evidence from Syria.’
  **Authors:** Elisa Fraile Aranda, Andreas Nicklisch, Lamis Saleh, Stefan Voigt
  **Abstract:** The civil war in Syria has been raging since 2011. It is generally considered as one of the most violent battles in the 21st century; a countless number of civilians have suffered violence or witnessed war related experiences. There is a substantial fear that this horrible experience influences important values and habits of Syrians, particularly subjects’ degree of religiosity and their acceptance of violence. To analyze this issue, we run a series of online experiments among Syrians in Syria, some from regions affect by civil war, some not affected. We analyze their war experience and their current level of psychological distress. Further, we approximate their degree of religiosity by means of a questionnaire, while eliciting their use of punishment in a modified ultimatum game. This game allows us to estimate their response in terms of punishment to different degrees of norm violation. We relate individual differences in the severeness of punishment and changes in the level of religiosity with
war experience and their current level of psychological distress. Finally, we discuss the implications of our findings for the future development of the Syrian society.

Session Topic: Beliefs (Room 009)

- **Matej Lorko.** ‘Historical information and project duration estimates.’

**Authors:** Matej Lorko, Maroš Servátka, Le Zhang

**Abstract:** The ability to accurately estimate the duration of future activities is the cornerstone of successful project management practice. Accurate project estimates reduce not only the risk of schedule and cost overruns, but also the possible underutilization of company resources. Traditionally, thorough project specification has been perceived as a crucial determinant of accurate project duration estimates. However, even the most extensive description cannot capture every detail of the proposed project activities, especially at the early project stages, when the exact scope is often unclear. Thus, project planners focus on provided information, often neglecting that it might be incomplete. As a result, project duration estimates may become understated. We conjecture that accuracy of project schedules can be improved by consulting historical information regarding the same or similar projects. We experimentally test our conjectures in a real effort task. Subjects first estimate the time it will take them to complete the task, indicate their subjective confidence with the estimate and then perform it. We manipulate the description of the task and whether and when subjects receive the historical information. We examine the relationship between the detail of the task description, estimation accuracy, subjective confidence in estimates and the effect of historical information on former beliefs regarding the task duration. We find that although very detailed task description eliminates the typical underestimation of the task duration, it also induces large variance in individual estimates, which impairs the overall estimation accuracy. On the other hand, the provision of historical information significantly improves the estimation accuracy. This effect is independent on the timing of information provision. Finally, we find that subjective confidence in estimates is not a function of quality or the quantity of available information, supporting the conjecture that people often do not account for the possibility that they miss critical evidence for their judgment.
• **Ritwik Banerjee.** ‘Self-confidence spillovers and motivated beliefs.’
   **Authors:** Nabanita Datta Gupta, Marie Claire Villeval
   **Abstract:** Is success in a task used strategically by individuals to motivate their beliefs prior to taking action in a subsequent, unrelated, task? Also, is the distortion of beliefs reinforced for individuals who have lower status in society? Conducting an artefactual field experiment in India, we show that success when competing in a task increases the performers’ self-confidence and competitiveness in the subsequent task. We also find that such spillovers affect the self-confidence of low-status individuals more than that of high-status individuals. Receiving good news under Affirmative Action, however, boosts confidence across tasks regardless of the caste status.

• **Zeeshan Samad.** ‘Self-deception.’
   **Abstract:** This paper studies self-deception. Individuals have expectations of themselves that are inconsistent with their true preferences but they deceive themselves into thinking that these two are consistent. This paper presents a model of self deception that generates hypotheses regarding individual behavior. This paper also presents an experiment design that decomposes the effect of true preferences and of expectations that individuals have of themselves on sending money in dictator games. The primary hypothesis that the experiment tests is that dictators often send money because they expect themselves to be altruistic, not because they truly are altruistic.

• **Jan Zilinsky.** ‘Learning about income inequality changes views but does not mobilize voters.’
   **Abstract:** This paper studies whether limited information about inequality accounts for the anti-tax preferences of American voters. Unlike standard surveys, this experiment examines preferences for taxation while controlling for perceived economic opportunity, beliefs about how the economy works, and views about the sources of inequality. Random assignment to information exposure about income inequality is used to identify a causal relationship between awareness about income inequality and the perceived fairness of the economy. The first effect of information is an increase in pessimism about economic opportunity. However, subjects who are exposed to information are not more willing to take specific action (support higher taxes) compared to the uninformed control group.
Session Topic: Industrial Organization (Room 001A)

- Silvester Van Koten. ‘Self-regulation and meta-regulation – regulating the members or the SRO? A theoretical and experimental.’

Abstract: Regulatory investigations by Self-Regulatory organizations (SROs) have been recognized to usually be cheaper than investigations by the government. However, in practice, oversight by an SRO is mostly still supplied with forms of governmental oversight. The government may exert oversight over the SRO itself, a construction referred to as “meta-regulation” or “co-regulation”, or over the members of the SRO. Indeed, the overall performance of SROs has been mixed and theoretical models show that SROs have incentives to set lax standards or cover up detected violations. However, some research indicate that meta-regulation, oversight of the SRO itself, may nonetheless not be necessary in some settings.

Using a costly-state-verification model, DeMarzo et al. (2001; 2005) show that when the government implicitly threatens to perform additional investigations of the SRO’s members, a relatively “good” outcome can be established as an equilibrium. In this “good” outcome, the SRO chooses to follow high performance standards in order to pre-empt any of the (relatively costly) governmental investigations. As a result, no costly governmental investigations of the SRO’s members take place, and no meta-regulation of the SRO is necessary.

I extend this model to include plausible settings where the actual rigor of oversight by the SRO can be verified only ex-post. I show that in such settings, the SRO may have incentives to announce stricter regimes than it effectively implements and that, as a result, a “bad”, Pareto-inefficient outcome is established as an equilibrium. In the “bad” outcome, the SRO relinquishes all oversight to the government. The predictions of this model are supported by experimental tests. The “good” equilibrium can be re-established as an equilibrium with sufficient meta-regulation of the SRO. The results thus indicate a continuing need for meta-regulation in these settings. This form of meta-regulation may be of a relatively light-handed nature, limited to verifying and sanctifying that the SRO implements its announced policies.
• **Siqi Pan.** ‘Do Exploding Offers Really Explode? The Role of Commitment in Search Deterrence.’

**Authors:** Siqi Pan, Xin Zhao

**Abstract:** Exploding offers are frequently used in labor markets and consumer goods markets to discourage search. The implementation of such strategies requires that the proposer have the power to commit, which is often not the case in real-world markets. In a lab experiment, we investigate the role of commitment power in the proposer’s use and the receiver’s response of exploding offers. We also compare strategies that deter search on the time dimension (exploding offers) and those focus on the monetary dimension (price/wage discrimination).

• **Jason Shachat.** ‘Group identity and implicit collusion in Cournot competition: Theory and experiments.’

**Authors:** Jinrui Pan, Jason Shachat, Qinjuan Wan

**Abstract:** We evaluate the impact of group identity on implicit collusion in Cournot competition with one-shot, finitely repeated and indefinitely repeated interactions. We develop game theoretic predictions assuming group identity impacts decision makers’ social preferences. One-shot predictions are intuitive; in-group identity leads to more collusion than out-group identity. Under repeated interactions predictions are counterintuitive. Out-group identity leads to greater incidence and longer sustained collusion. We test these predictions in a series of laboratory experiments with induced group identity. We find economically insignificant differences in one-shot interactions. In repeated interactions we find in-group identity leads to significantly more collusion. This feature grows within and across super games. We find this behavior is driven by in-group duopolies’ greater use of negative and positive reciprocal norms. Group identity affects implicit collusion by modifying access to behavioral norms incongruent with the best response motivations of Nash equilibrium, not through the shaping of social preferences.
• Xiaoyuan Wang. ‘The effect of information disclosure on an experimental hold-up game.’

Authors: Kaiming Zheng, Debin Ni, Yang Yang

Abstract: Many relation-specific investments are associated with great risk, because investors may need to bargain with investees over the potential return and the bargaining result depends heavily on investees’ preferences and subsequent choices. Information on investees’ preferences plays a key role in improving investment decisions. We provide investors with their partners’ previous performance in two sub-games of an experimental hold-up game: in one treatment, each investor observes her partner’s previous choice in the bargaining stage and in another, each investor observes the investment stage. Using a lab experiment, we find investors use the information to improve their investment decisions and such information reduces investors over-investment mistakes. However, there still exists significant mistakes. We discuss the potential source of the mistakes and conclude that similar behavior in different economic settings can have very different impacts on players’ interpretation and expectations of players’ behavior.

Parallel Sessions VI. (3:30 PM – 5:00 PM)

Session Topic: Industrial Organization (Room LH007)

• Karim Sadrieh. ‘Short-term versus long-term contracting: Empirical assessment of the ratchet effect in supply chain.’

Authors: Lennart Johnsen, Abdolkarim Sadrieh, Guido Voigt

Abstract: In laboratory experiments, we compare the performance of short-term and long-term contracts in a two-period supplier-buyer dyad with asymmetric cost information. Our results support the game theoretical prediction that the supplier should strictly prefer long-term over short-term contracts. In contradiction to theory, the supply chains in our experiments do not benefit from a series of short-term contracts in comparison to a long-term contract. Short-term contracting evokes (a) higher rates of contract rejections, (b) the “ratchet effect”, that is, the buyer is reluctant to reveal her private information early on because she expects increasingly disadvantageous contract offers as the supplier improves his information
about her type, and (c) some suppliers fail to adapt their contract selection to the information they can extract from the buyer’s previous contract choice.

- **Francisco Gomez Martinez.** ‘Partial Cartels and Mergers with Heterogeneous Firms: Experimental Evidence.’

  **Abstract:** A usual assumption in the theory of collusion is that cartels are all-inclusive. In contrast, most real-world collusive agreements do not include all firms that are active in the relevant industry. This paper studies both theoretically and experimentally the formation and behavior of partial cartels. The theoretical model is a variation of Bos and Harrington’s (2010) model where firms are heterogeneous in terms of production capacities and individual cartel decisions are endogenized. The experimental study has two main objectives. The first goal is examine whether partial cartels emerge in the lab at all, and if so, which firms are part of it. The second aim of the experiment is to study the coordinated effects of a merger when partial cartels are likely to operate. The experimental results can be summarized as follows. We find that cartels are typically not all-inclusive and that various types of partial cartels emerge. We observe that market prices decrease by 20% on average after a merger. Our findings suggest that merger analysis that is based on the assumption that only full cartels forms produces misleading results. Our analysis also illustrates how merger simulations in the lab can be seen as a useful tool for competition authorities to back up merger decisions.

- **Jana Peliova.** ‘Experimenting with Price Gouging and Newsvendor problem.’

  **Authors:** Zuzana Brokesova, Cary Deck, Jana Peliova

  **Abstract:** In the newsvendor problem, a seller must decide how much inventory to hold prior to the quantity demanded being realized when the price is fixed. We introduce the game similar to the newsvendor problem, but translated into the price dimension. This game represents a price gouging game. In daily reality, this phenomenon could be observed regularly after a natural disaster even thought that price gouging is prohibited by the law and usually a subject of high fines.

  To explore Price Gouging, we conducted a series of controlled laboratory experiments using a 2 &times; 2 design, where we tested the difference in
the behavior within the Price gouging and Newsvendor game under the low and high costs. Laboratory experiments were run at the University of Alabama where 104 experimental subjects made 5 200 decisions regarding the price or quantity in total. Our preliminary results support pull-to-center effect in Price Gouging similar to the effect observed in the Newsvendor game. We do not observe the difference in choices based on the type of the game but we observe the difference based on the costs. We also identified that the CRT score affected the consistency, where higher score reduced the price/quantity switching in both games and these decision were the same across different phases of decision making.

Session Topic: Lying (Room 004)

- **Nick Feltovich.** ‘What kind of communication is best? Cheap talk with two senders and one receiver.’

**Authors:** Nejat Anbarci, Nick Feltovich, Mehmet Y. Gurdal

**Abstract:** We investigate communication and decision making in a setting with two senders and one receiver. Each sender knows both senders’ quality, while the receiver is completely uninformed. After a round of communication, the receiver chooses to match with one of the senders. The receiver prefers to match with the higher-quality sender, while each sender simply prefers to be matched. We vary the form of communication. In our Byte treatment, a sender sends a single number, indicating her quality. In our Rich treatment, a sender sends a single free-form text message. In our Chat treatment, the receiver can chat with each sender individually, in two simultaneous two-way conversations. Our main result is that in the Chat treatment, receivers perform substantially better than chance in picking the higher-quality sender, while in the Byte and Rich treatments, receivers fare no better than chance. This difference seems to be due to receivers being able to extract more truthful and more precise information in the Chat treatment compared to the other two treatments.
• Manuel Munoz. ‘Web of Lies: Preventing the Spread of False Information in Networks through Verification.’

Authors: Manuel Munoz, Kinga Makovi

Abstract: The spread of false information (e.g. fake news, gossip, secrets) in social media has caught a great deal of attention by both academic research and popular news. Importantly, it has been shown that most people do not share misinformation to hurt others but to gain personal benefits that reinforce their wellbeing, status or political beliefs. In other words, misinformation has a self-perpetuating nature, which sparked interest in identifying measures that reduce its dissemination. The dominant measures proposed are linked to the use of verification. The underlying assumption is that if information is easy to identify as false, most individuals will not disseminate it. We test this assumption through a controlled online experiment. We vary how individuals verify the truthfulness of the information they receive in three conditions: no verification, exogenous verification (individuals are forced verify) and endogenous (individuals can choose to verify or not). We also vary the length of the communication network in two conditions: short (2-players) and long (3-players). While the verification variations allows players to identify whether a lie is being transmitted or not, length variations allow players in shorter networks to identify who the liar is. This two variations are representative of lying costs (whether to know one is lying or not) and reputational costs (whether others know one is lying or not), which have been observed to significantly explain lying behavior in experiments. Our results show the conditions under which verification is effective in preventing the spread of lies in social networks.

• Frederic Schneider. ‘The Persistent Power of Promises.’

Authors: Florian Ederer, Frederic Schneider

Abstract: This paper investigates how the passage of time affects trust, trustworthiness, and cooperation. We use a hybrid lab and online experiment to provide the first evidence for the persistent power of communication. Even when 3 weeks pass between messages and actual choices, communication raises cooperation, trust, and trustworthiness by about 50 percent. Lags between the beginning of the interaction and the time to respond do not substantially alter the trustworthiness of the responder. Our results further suggest that the findings of the large experimental literature on trust that focuses on laboratory scenarios, in which senders are forced to choose their
actions immediately after communicating with recipients, may translate to more ecologically valid settings in which individuals choose actions outside the lab and long after they initially made promises.

• **Francesca Marazzi.** ‘Telling the Other What One Knows? Strategic Lying in a Modified Acquiring-a-Company Experiment with.’

**Author:** Andrej Angelovski, Daniela Di Cagno, Werner Guth, Francesca Marazzi

**Abstract:** Lying for strategic advantage is analyzed via a modified Acquiring-a-Company game (Samuelson and Bazerman, 1985) where both buyers and sellers have private information about the parameters affecting their payoffs. Their different evaluations of the company are linearly linked via an undervaluation coefficient for the seller, about which only the buyers are informed, while only the seller is aware of its actual value. Before bargaining, we allow both parties to reveal what they know via cheap-talk numerical messages. Will such mutual message exchange be reliable and enhance trade? Will misreporting prevail and be role and gender dependent? Strategic misreporting for sellers is higher throughout the experiment. Regarding gender, women misreport less, especially as sellers, and offer higher prices as buyers.

**Session Topic: Asset Markets (Room 005)**

• **Lijia Wei.** ‘Supply Fluctuations and Bubbles of Real Assets: A Experimental Study.’

**Abstract:** This paper explores the bubble problem of real assets using experimental economics. In the experimental setting of this paper, participants need to repeat the purchase of real assets and make production decisions. The basic value of real assets remains unchanged during the experiment. Our innovations to previous literature are: (1) constructing the setting of constant or tight asset supply (2) constructing the setting of the basic value of the asset (2) the real assets constructed in the experimental design are different from the financial assets. Attributes. We find that when the supply of real assets is constant, the price will generate a bubble, but the bubble will soon burst; when the supply of
real assets is gradually reduced, the participants cannot rationally use the intertemporal smoothing, and the asset price is slow. Rise to a skyrocketing phenomenon. Based on the expected data of participants’ price collection in the experiment, this paper finds that the difference between expected and actual prices drives the rise and fall of asset prices. The paper also finds that if the participants are allowed to borrow the real assets over time, it will help to stabilize the price bubble of the assets.

• **Nilanjan Roy.** ‘Achieving Pareto optimality even though prices are “wrong”.’
  **Authors:** Edward Halim, Yohanes E. Riyanto, Nilanjan Roy
  **Abstract:** We design an infinite horizon dynamic asset market experiment with perishable consumption and a long-lived asset where the gains from trade originate from individuals experiencing income shocks. The presence of traders having induced motive to smooth consumption is not sufficient to eliminate price bubbles. Despite the asset being consistently priced higher than the risk-neutral fundamental value, trades improve welfare with investors moving closer to Pareto optimal allocations. The co-existence of traders with income shocks along with those having no induced motive to trade does not hinder in the former smoothing their consumption stream. Our results hold for markets with and without aggregate risk.

• **Adriana Breaban.** ‘Animal Spirits, Greater Fools, or Safety First: How do optimism, cognitive reflection, and risk aversion.’
  **Authors:** Adriana Breaban, Mark Schneider
  **Abstract:** We experimentally investigate three factors that may influence trading strategies and performance during stock market bubbles: Cognitive reflection, risk aversion, and optimism. Subjects view real time series data of price changes in two markets - one from the dot-com bubble of the early 2000’s and the second from the more recent housing bubble that unfold over 15 trading periods each. In each period, subjects can allocate their wealth between a risk-free asset yielding a constant return and shares of a stock whose return distribution is ambiguous. We find that our three factors of interest are uncorrelated with each other, and that they identify multiple sources of heterogeneity in trading behavior. In particular, subjects with lower cognitive reflection scores are more likely to increase their leverage in the market after periods of price decreases, a behavior
consistent with holding onto losses. More risk-averse subjects divest more from the market than less risk-averse subjects in the last trading periods while more optimistic subjects divest less from the market than pessimistic subjects during the last trading periods. More optimistic subjects earn less than pessimistic subjects while more risk-averse subjects and high cognitive reflection subjects earn more than less-risk averse and low cognitive reflection subjects. Our findings suggest that cognitive reflection and risk aversion are traits which help ‘insure’ investors against large losses from stock market crashes while optimism makes traders prone to large losses when the bubble ‘bursts’.

• Christina Rott. ‘Preference for Housing Services and the Magnitude of Housing Bubbles: Evidence from a Macro-Experiment’

Authors: Stefanie J. Huber, Giovanni Giusti

Abstract: Understanding the conditions under which large house price bubbles occur is fundamental. We shed new light on this issue in a laboratory setting. We find that endowing subjects with a weaker preference for housing services - relative to other consumption goods - creates larger experimental house price bubbles. This is in line with the theoretical model mechanism proposed by Huber (2017). The experimental result also speaks to the empirical cross-country regularity found in Huber (2017): countries that spend a lower share of total consumption on housing services, experienced significantly larger house price bubbles during 1970-2014. This paper also contributes to the literature on experimental asset markets more generally. The paper provides a novel experimental design where both a market for the traded asset and a market for the dividend of that traded asset exists simultaneously. In addition, this paper provides novel design features for bringing OLG models to the laboratory.
Session Topic: Games (Room 006)

• **John Wooders.** ‘Nash at Wimbledon: Evidence from Half a Million Serves.’

  **Authors:** Romain Gauriot, Lionel Page, John Wooders

  **Abstract:** Minimax and its generalization to mixed strategy Nash equilibrium is the cornerstone of our understanding of strategic situations that require decision makers to be unpredictable. Using a dataset of nearly half a million serves from over 3000 matches, we examine whether the behavior of professional tennis players is consistent with the Minimax Hypothesis. The large number of matches in our dataset requires the development of a novel statistical test, which we show is more powerful than the tests used in prior related studies. We find that win rates conform remarkably closely to the theory for men, but conform somewhat less neatly for women. We show that the behavior in the field of more highly ranked (i.e., better) players conforms more closely to theory.

• **James Fisher.** ‘Interacting Cascades Experiment: Informational Spillovers.’

  **Authors:** John Wooders

  **Abstract:** We experimentally test whether information spills over between separate groups using the Interacting Cascade of Fisher and Wooders (2017). We find that spillovers occur and about are half as intense as predicted in theory. This work is the first (to the best of our knowledge) to experimentally examine and test the presence and magnitude of between-group information spillovers.

• **Javier Perote.** ‘Endogenous vs. Exogenous Leadership in teamwork: An experimental study.’

  **Authors:** Carlos E. Jijena, Javier Perote and José David Vicente-Lorente

  **Abstract:** This paper presents the results on laboratory experiments designed for studying the effectiveness of leadership as a way to improve efficiency in team production. In a three-player minimum effort game framework, we compare efficiency level of outcomes from three treatments: (1) when the leader’s position was auctioned among team members, namely, ‘endogenous leadership’; (2) when the leader is chosen randomly, namely ‘exogenous leadership’; and (3) when there is no leader, considered as ‘control’ treatment. We found that the existence of a leader that
sends messages about her recommended contribution to the remaining members of the team, leads to significant higher contributions. We also confirm that the nature of leadership entails significant differences in the dynamics of contributions despite their similarity in the final outcomes. While endogenous (auctioned) leadership experiments support the role of leadership as an effective mechanism to achieve efficiency in team production, the effects of exogenous leadership seem to be conditioned by ‘negative learning’ and ‘order’ effects that make members to reduce their contributions over time.

- Jonas Fooken. ‘Gift exchange when gifts are taxed.’
  Authors: Johannes Becker, Jonas Fooken
  Abstract: The importance of exchange in the labour market when employers and workers interact has been widely documented in the literature. We study what happens to the level of gift exchange when the gift is taxes, which commonly occurs in real labour markets, testing for differential effects of who has to pay the tax. Results show that taxing the reciprocator leads to lower return gifts, while taxing the first mover has very little effect. These findings inform policy making in the real world and provide indications which models of pro-social decisions, which are often used to conceptualise reciprocity, are more suited to explain behaviour when taxes are introduced.

Session Topic: Communication (Room 009)
- Pablo Hernandez-Lagos. ‘Cooperative Initiative through Pre-Play Communication in One-Shot Games.’
  Abstract: I consider two games, a stag-hunt and a prisoners’ dilemma. Each game features non-binding, costless, and free-form pre-play communication. I focus on players who verbally first suggest cooperation in each game. I study experimentally whether the frequency of verbal initiative-taking for cooperation varies across games and whether initiative-taking induces cooperation in each game. In the stag-hunt, I find that initiative-taking is ubiquitous and initiators cooperate more often than non-initiators. In the prisoners’ dilemma, initiative-taking is less frequent relative to the stag-hunt and initiators cooperate remarkably more often than non-initiators.
In this case, initiators who cooperate are also more altruistic, averse to lying, and believe others are likely to cooperate compared to initiators who defect. Initiating a suggestion to cooperate signals propensity to cooperate even when monetary incentives encourage defection. Moreover, optimistic and intrinsically motivated initiators are essential in attaining mutual cooperation when the best response is to defect from it.

**Yang Yang.** ‘On Language and Meaning: A Randomized Experiment.’

**Authors:** Daniel Houser, Yang Yang

**Abstract:** We develop a method for random assignment of language to participants in a laboratory experiment. We use this approach to test the linguistic relativity hypothesis (also referred to as the Sapir-Whorf hypothesis). Linguistic relativity suggests that the structure of one’s language can influence one’s perceptions, interpretations and beliefs about the world around them. Although provocative, empirical evidence on this hypothesis has been elusive. A reason is that previous empirical studies typically rely on naturally occurring languages whose speakers differ in ways that correlate with language differences. Here we hypothesize that linguistic relativity can emerge when the same object resides in different semantic categories across different languages. To test this, we develop a novel extension of laboratory games within which languages emerge endogenously. We show, first, that one can control the semantic categories of the emergent language by varying the game’s incentives. This enables random assignment of language. Advantaged by this randomization, our experiment finds support for the hypothesis that the same object’s meaning can vary according to its semantic category. Our methodological and substantive insights promise to be important in improving communication, cooperation and understanding across human societies.

**Marianne Stephanides.** ‘Helping and communication.’

**Abstract:** Helping behavior may be affected by the possibility to exchange messages such as apologies, either as substitutes or as complements. We conduct a laboratory experiment that explores this issue in a stochastic game in which one agent may help to reduce the likelihood of a negative event affecting a second agent, who can in turn reward or punish the first agent after realization of the outcome. In this context, we examine the
strategic effect of allowing the first agent to send a one-side messages (e.g. ‘I am sorry’, ‘you are welcome’) to the second agent, after the outcome has realized, on helping, reward, and punishment behavior. Our two-factorial design varies whether a message can be sent, and whether the second agent is only informed about the outcome of the random move or also about the likelihood-affecting action of the first agent. We find that the information setting plays an important role. People help less often if they are allowed to send a message after the helping decision in a setting with perfect information about the first agent’s choice. However, allowing to send messages shows no positive effect on the second agent’s reward decision, when the first agent’s helping action is revealed. When the information about helping is not revealed, messages have a positive effect on reward, but people do not help less.

• Lu Dong. ‘Talking Behind Your Back: Asymmetric Communication in a Three-person Dilemma.’

Authors: Klaus Abbink, Lu Dong, Lingbo Huang

Abstract: Communication has been regarded as one of the most effective devices in promoting team cooperation. But asymmetric communication sometimes breeds collusion and is detrimental to team efficiency. Here, we present experimental evidence showing that excluding one member from team communication hurts team cooperation: the communicating partners collude in profit allocation against the excluded team member, and the latter reacts by refraining from exerting effort. We further show that allowing the partners to reach out to the excluded member helps restore cooperation and fairness in profit allocation. But it does not stop the partners from talking behind the other member. They sometimes game the system by tricking the excluded member to contribute but then grabbing all profits for themselves.
Session Topic: Field Experiments (Room 001A)

• **Mirco Tonin.** ‘Pay-What-You-Want to support independent information - A field experiment on motivation.’

  **Authors:** Alessandra Casarico, Mirco Tonin

  **Abstract:** Pay-what-you-want schemes can be a useful tool to finance high quality and independent news media without restricting readership, therefore guaranteeing maximum diffusion. We conduct a field experiment with the Italian information site lavoce.info to explore how to structure a campaign in a way that maximises readers’ willingness to contribute. We compare messages stressing two possible motivations to contribute, namely the public good component of the news or image motivation. We also test the effect of including information about the tax allowance associated with donations. While the particular motivation stressed does not have a significant impact, information about tax allowances surprisingly reduces overall donations, due to a reduction in the number of (small) donors. Stable unsubscriptions from the newsletter suggest that the campaign does not have an adverse effect on readers.

• **Maria Recalde.** ‘Leadership and risk-taking: A field experiment on the mechanisms underlying social influence.’

  **Authors:** Kate Ambler, Susan Godlonton, Maria Recalde

  **Abstract:** We conduct an artefactual field experiment with 121 social groups in rural Malawi to investigate peer effects in risk-taking and the mechanisms underlying social influence. Treatments vary whether individuals observe the behavior of a formally elected group leader, an external leader, or a randomly selected peer. Within each treatment we also vary the structure of the underlying risk and whether the choice observed by individuals is realized (Bursztyn et al. 2014). Results show that peers are the most influential agents in our sample, followed by elected leaders and external leaders. Different mechanisms underlie the influence of these agents. Individuals follow their peers because they learn from their actions, while they follow external and elected leaders because they derive other forms of social utility from following their example. Our paper contributes to the literature by distinguishing the mechanisms by which different members of a social group influence others. From a policy perspective, our study suggests that information about peer interest and intentions can be leveraged to encourage social learning and information diffusion in environments where significant barriers for behavior change exist.
• **Fernanda Leite Lopez de Leon.** ‘Prejudice in the Age of Brexit: A Field-Experiment.’

**Authors:** Markus Bindemann and Fernanda Leite Lopez de Leon

**Abstract:** The 2016 EU referendum results, and the Brexit vote, were perceived as a statement against immigration. We conducted a field-experiment in Britain to test this perception and to investigate whether the Brexit vote had triggered negative attitudes and anti-social behaviour towards immigrants. Our (non-deceptive) experimental intervention shifted individuals’ perceptions about the local support for Brexit in the UK. We do not find evidence that the perception of a larger support for Brexit led to a demand for tighter immigration policies. However, in a dictator game, individuals gave less to Europeans and became more likely to express negative views about them. Overall, our results indicate modest impacts of the Brexit vote, but they point to the effect of information revealed in election outcomes in changing citizens’ attitudes.

• **John Gibson.** ‘Quality, Quantity, and Price: Experimental Evidence on Taxing Soft Drinks.’

**Authors:** John Gibson and Steven Tucker

**Abstract:** We conducted laboratory experiments in New Zealand to study how consumers adjust the quality of soft drinks demanded as prices change. We introduce two key features seen in the field: a distribution of prices across space because of transport costs, which alters the relative price of quality; and, consumer responses to price changes that occur on both the quality margin and the quantity margin. Most of the estimates of the price elasticity of quantity demand from observational data that are used to advocate for taxes on sugar-sweetened beverages ignore these two features. Consequently, these studies have overstated the likely reduction in the quantity of sugary drinks that would be consumed if health-related taxes are introduced for these drinks.

Our laboratory experiment with 360 participants was set up to mimic a typical household survey, with participants randomly allocated into one of 36 clusters (‘villages’) where prices differed between clusters because of transport costs. Participants made choices over 14 soft drinks (six energy drinks, five colas, three other soft drinks) whose baseline prices range from $2.80 per liter to $11.20 per liter (US$2 to US$8), where this quality variation reflects brand effects, package size effects, and product type effects.
In addition to the between-subject variation we also have within-subject variation from six counterfactual price distributions based on ad valorem and specific taxes of various rates, and also two types of price discounts. We gathered five rounds of data from participants, corresponding to five days of recording in a typical household survey, allowing for a stochastic distribution of daily prices and incomes.

We observe quality downgrading in expensive villages within our lab, in keeping with the patterns seen in the field data. In other words, buying lower quality drinks is one way to cope with higher prices. Counterfactual price rises also cause quality downgrading, while price cuts cause the average quality purchased to rise. If we aggregate across products to consider group-level price elasticities, the own-price elasticity of quantity demand for soft drinks is overstated by about 40% if the response of quality to price is ignored. The nature of our participants and of the drinks that were feasible to use in our economics laboratory make this likely to be a lower bound on the degree of bias.
Session Topic: Bargaining (Room LH007)

- **Olivier Bochet.** ‘Experiments on multidimensional bargaining.’
  
  **Authors:** Olivier Bochet, Manshu Khanna, Simon Siegenthaler
  
  **Abstract:** Negotiations and bargaining are notions which are the heart of the functioning of modern market economies. In the economic literature, the standard case studied is one where parties bargain over the terms of trade of a single object. However, many real world negotiations do not necessarily fall under this simple benchmark case. Labor contracts, for instance, involve multiple attributes such as wage, (flexible) work hours, and other “perks.” Multidimensional negotiations offer a richer set-up than the case of a single object, because the number of qualitatively different information structures increases and it becomes possible to trade bundles of objects. We study an experimental environment where buyers and sellers negotiate over multiple items. Our treatments vary the negotiation setting and the level of information, providing a comprehensive account of bilateral trade outcomes in the lab when there are multiple objects.

- **Ben Greiner.** ‘The economics of colors: A null result.’
  
  **Authors:** Ben Greiner, Marianne Stephanides
  
  **Abstract:** Color research has a long tradition in psychology, consumer behavior, and marketing research. The literature suggests that exposure to colors influences mood and emotions of humans as well as their attitudes towards products. This paper makes two contributions. First, we review the existing literature in science and psychology on the effects of environmental colors (red and blue) on physiological functions, mood, and consumer/economic decision-making, insofar it may be potentially relevant to experimental and behavioral economists. Second, we conduct a laboratory experiment with a typical experimental economics subject pool testing the predicted effects of environmental colors red and blue on decision-making in an incentivized Ultimatum Game experiment. We find no statistically significant effect. However, we also cannot replicate previous results of exposure to colors red and blue on mood as measured by established
questionnaire instruments. Our results suggest that experimental economists do not need to worry about the potential confound of colors in economic decision-making.

• Bassim Allaheeb. ‘The effect of effort in the ultimatum game: A cross-cultural analysis.’
  **Authors:** Bassim Allaheeb, Luigi Mittone, Matteo Ploner
  **Abstract:** The Ultimatum Game (UG) is a useful experimental tool for studying issues such as fairness and punishment. This study examines the impact of effort on subjects’ behavior in the UG. More precisely, it analyzes the impact of responders’ effort on the proportion of the endowment they are willing to accept from proposers. Three experiments were run in Italy, China, and Saudi Arabia. In each community, there were two experiments. In the first experiment, exerting effort by responders is done by making slider-task on computers to reach a proportion they believe proposers would take into their consideration when they split the proportion. Responders must exert effort to be able to claim for a certain proportion without binding the proposers’ decision whom have the ability to offer any amount from zero to sixty percent. This experiment is controlled by another group where responders have an option to claim proportions without exerting effort. These two experiments are used to observe to what extent hierarchy or property rights have an impact on subjects’ behavior. We found that in Italy and China, property rights play a role, as in the first experiment, they significantly reject low offers more than without exerting effort. However, in Saudi Arabia, the experiment results were affected by hierarchy where subjects were influenced by both religion’s teachings as well as culture.

• Lina Lozano. ‘The impact of the menstrual cycle on bargaining behavior.’
  **Authors:** Lina Lozano, Christina Rott and Arno Riedl
  **Abstract:** This paper examines whether the menstrual cycle influences women’s bargaining behavior and outcomes. We propose that the menstrual cycle - and possibly the hormones progesterone and oestrogen - influence bargaining outcomes in two possible ways: First, via a direct impact; and second, via risk and social preferences as mediators. 168 female participants are asked to track their menstrual cycle for three months before the experiment to obtain a robust measurement of their cycle
length and phases. After the tracking period, they come to the laboratory experiment to play an unstructured bargaining game followed by a risk and social preference task. Our results confirm a variation in bargaining behavior during the menstrual cycle. Particularly, we observe that such differences in bargaining behavior are mostly correlated with the ovulation and pre-menstrual phases. That is, women bargain less aggressively during the pre-menstrual phase compared to all the other phases, and specially, compared to ovulation. Interestingly, this result goes in the same direction as the evidence for competitive behavior, which suggest that women are less competitive when the levels of progesterone are in their highest level. Moreover, a portion of these changes in bargaining behavior is partly, but not totally, explained by risk and social preferences. This result proposes that differences in negotiation behavior and outcomes might not only be driven by nurture as suggested, but maybe also by nature.

Session Topic: Relative Performance (Room 004)

- Gwen-Jiro Clochard. ‘Improved information or taste for ranking? Experimental evidence of the role of relative performance.’

Authors: Gwen-Jiro Clochard, Guillaume Hollard and Julia Wirtz

Abstract: Relative performance feedback has been proved a powerful tool to enhance performance. Subjects who receive information about their rank, in addition to their performance, improve more than those who receive information on their performance only.

However, the exact channel through which feedback affects performance is still a matter of debate. Most theoretical accounts use an ad hoc specification of the utility function in which individuals are assumed to care about their relative position, even if their ranking is not publicly observable.

We here propose to challenge the taste-based approach using a model based on information. We consider subjects who have standard preferences but face uncertainty about the true return of their technology. In this setting, feedback helps to remove uncertainty relative to technology and thus increases performance because of a better choice of technology. In a tournament setting, taste-based models predict low improvement of the lowest performers, while the informational approach predicts a substantial improvement all along the performance distribution.
We bring our model to data using a field experiment consisting of a tournament based on four math tests taken by high school girls. We show that our models fits our data remarkably well for reasonable values of the parameters.

• Juliana Silva Goncalves. ‘Long-lasting effects of relative age at school.’
  Authors: Lionel Page, Juliana Silva Goncalves, Dipa Sarkar
  Abstract: We investigate the long lasting effects on behaviour of relative age at school. We conduct an online incentivised survey with a sample of 1007 participants aged 24 to 60 years old, who were born at most two months before or after the school entry cut-off date in four Australian states. We find that participants who were among the oldest in the classroom throughout their school years display higher self-confidence in the adult age compared to those who were among the youngest. They are also more willing to enter in some form of competition, declare taking more risk in a range of domains in their life and being more trusting of other people. These results offer important insights on the possible behavioural mechanisms underlying the differences in career outcomes between people who were relatively young and old at school. They are also relevant for the prospective design of policies to mitigate inequalities created by school entry cut-off dates.

• Mingye Ma. ‘Using relative marking scheme to motivate group effort provision: Field evidence from college students.’
  Authors: Mingye Ma and Youzong Xu
  Abstract: This paper proposes a novel relative marking method to promote effort provision in undergraduate group assignment. The critical concern of giving the same marks to all group members is free-riding. We propose an unequal group marking scheme in which students may get unequal marks depending on their self and peer evaluations. Prior to the start of the group project, the course convenor informs all students that they will be asked to privately rate their own and peers’ contributions by the end of the project. Students’ individual marks thus depend on the following two parameters: (1) the overall group mark (same for all group members), which is defined by the overall assignment quality and marked by the course convenor; (2) their individual contribution parameter, which is determined by self and peer evaluation.
We conduct a field experiment with 800 students from a large undergraduate introductory economics class. First, students on average rate themselves 6.5% higher than their peers. Second, academically stronger students get a higher rating from their group members and rate others lower. Third, the gender difference in self and peer rating is significant. Compared with males, female students give lower evaluations for both themselves and their peers. Both male and female students rate their female peers higher than their male peers. Finally, compared to previous years, We found a substantial decrease in the number of complaints about free-riding.

• Bettina Rockenbach. ‘Social context engineering in children.’
Authors: David Buttelmann, Robert Böhm, Bettina Rockenbach, Jarid Zimmermann
Abstract: Positive evaluations are important to succeed in social and economic life. The evaluation result often depends on the social context the evaluation is embedded in. By strategically shaping the social context, e.g., by choosing to compete against low rather than high performers, the chances of receiving a positive evaluation may be enhanced. While we know that adults manage to strategically shape their social context, little is known about when and how children develop this ability. We study this question experimentally in 180 children between 4 and 9 years of age. We show that children are able to strategically engineer their social context at about 6-7 years of age, and that inhibitory control and schooling play an important role in this development.

Session Topic: Public Policy (Room 005)
• Romain Ferrali. ‘Partners in crime? Corruption as a criminal network.’
Abstract: The integrity and efficiency of the bureaucracy are essential to the workings of any government, and bureaucratic corruption undermines both the legitimacy and capacity of the government. Indeed, corruption is among the primary challenges faced by governments throughout the developing world, and in much of the developed world as well. While much of the literature treats corruption as the product of individual miscreants, this paper introduces a model that recognizes the coalitional nature of corruption, which is based on networks of accomplices. The standard
prediction that organizationally isolated bureaucrats are most prone to corruption is emended—the model predicts that corruption will arise in isolated bureaucratic enclaves and, surprisingly, that the size of the enclaves will increase when confronted by more effective enforcement effort on the part of the government. The model suggests it would be sensible to redesign government agencies to puncture the isolation of enclaves.

• **Chagai Weiss.** ‘Can brief intergroup contact affect attitudes? A natural experiment in Israeli Medical Clinics’.

**Abstract:** In many societies, even when segregation or conflict are pronounced, brief intergroup contact in busses, markets, shops and hospitals is prevalent. Such contact is often theorized as a force influencing intergroup attitudes as well as voting behavior and violence. Despite the prevalence of such quotidian intergroup contact, and despite the prominent role of contact in multiple theoretical frameworks of ethnic politics, there is little evidence regarding its causal effects. Exploiting the random assignment of patients to doctors in medical clinics in Israel, and leveraging a treatment evaluation survey, I introduce a natural experiment suited to identify the causal effects of quotidian intergroup contact between Jewish (Palestinian) patients and Palestinian (Jewish) doctors. I further explore how doctors’ bedside manners, measured by aggregate ratings predating my experiment, moderate the effects of contact. Doing so, I seek to establish that the effects of contact, are conditional upon the “type” of out-group members with which subjects interact.

• **Matteo Ploner.** ‘When the state doesn’t play dice: An experimental analysis of cunning fiscal policies and tax compliance.’

**Authors:** Luigi Mittone; Matteo Ploner; Eugenio Verrina

**Abstract:** We test of the effect of aggressive fiscal policies on tax compliance in the lab. Our experimental setup allows tax agents to break a deontological rule concerning the implementation of inspections on a group of tax payers. In one incentive condition, tax agents have a direct monetary benefit from higher compliance; in another, they have none. Tax payers, on the other hand, go through a phase of stringent inspections under their tax agents and one where inspection probabilities are fixed and implemented by a random device. We find that tax agents bend the rules to their advantage. Many either perform very frequent inspections or place
them in a strategic way, managing to enforce a norm of high compliance. Those following the rules have no success. Surprisingly, this is true for both incentive conditions. Tax payers exposed to these audit strategies display nearly full compliance and continue to do so also when tax agents are inactive. We conclude that cunning fiscal policies can effectively be used by tax authorities, if it is transparent that they lead to higher overall compliance. This establishes a virtuous norm that can have positive spillovers even in domains where the state has less coercive power.

Session Topic: Principal Agent Problems (Room 006)

• Michal Durinik. ‘Post Promotion Effort and Group Identity.’
  Authors: Michal Durinik, Maros Servatka, Lyla Zhang
  Abstract: Firms often choose between an internal and external candidate for a vacant position. Does group identity play a role in deciding between internal and external candidate? If so, is this role just a tie-breaking one, or is the impact of group identity more substantial? We find that Decision Makers follow their self-interest first and favor in-groups only as long as this is not costly to them. We proceed to expand our design to ask: If promoted, does the internal candidate work harder through reciprocity, or is it the external one through positive surprise? We look at post-promotion effort levels for successful in-group and out-group candidates. We also elicit candidates’ beliefs about the decision maker’s choice, and decision maker’s beliefs about effort levels.

  Authors: Daniel Jones, Mirco Tonin, Michael Vlassopoulos
  Abstract: How does pay-for-performance (P4P) impact productivity, multitasking, and the composition of workers in mission-oriented jobs? These are central issues in sectors like education or healthcare. We conduct a laboratory experiment, manipulating compensation and mission, to answer these questions. We find that P4P has positive effects on productivity on the incentivized dimension of effort and negative effects on the non-incentivized dimension for workers in non-mission-oriented treatments. In mission-oriented treatments, P4P generates minimal change on either
dimension. Participants in the non-mission sector but not in the mission-oriented treatments sort on ability, with lower ability workers opting out of the P4P scheme.

- **Andrej Angelovski.** ‘Bidding for Better Jobs: An Experimental Comparison of Intra- vs. Inter-firm Hiring.’

  **Authors:** Andrej Angelovski, Jordi Brandts, Werner Gueth

  **Abstract:** Job candidates compete via bidding for higher and better-paid positions in two hierarchically structured firms where, even when hiring is firm restricted, one learns about outcomes in both firms. After assigning the top positions to the highest bidders at the cost of the highest unsuccessful bids, two intermediate positions in each firm are filled by similar (incentive compatible) auction rules. When failing to obtain one of those positions, a basic income is collected without bidding costs. Four rounds of inter-firm bidding are followed by intra-firm bidding. We study how pay differences within a firm’s hierarchy affect behavior, as well as how individual characteristics like gender, cognitive capability, personality traits etc. affect systematic overbidding and influence who ends up in which hierarchical position.

- **Sibilla Di Guida.** ‘Testing the myth of fee-for-service and overprovision in health care.’

  **Authors:** Sibilla Di Guida, Dorte Gyrd-Hansen, Anne Sophie Oxholm

  **Abstract:** Paying on the basis of fee-for-service is often associated with a risk of overprovision. Policymakers are therefore increasingly looking to other payment schemes to ensure a more efficient delivery of health care. This study tests whether context plays a role for overprovision under fee-for-service. Using a laboratory experiment involving Danish medical students, we test the extent of overprovision under fee-for-service when the subjects face different fee sizes, patient types, and market conditions. We observe that decreasing the fee size does not decrease overprovision when resources are abundant, but it does affect provision when resources are constrained. We also observe that patients who are harmed by excess treatment are at little risk of overprovision. Finally, when subjects face resource constraints, but still have an incentive to overprovide high-profit services, they hesitate to do so, implying that the presence of
opportunity costs in terms of reduced benefits to other patients protects against overprovision. Thus, this study provides evidence that the risk of overprovision under fee-for-service depends on fee sizes, patients’ health profiles, and market conditions.

Session Topic: Methodology (Room 009)

- **Stephanie Thomas**, ‘Using virtual environments to study health related decisions: early results using a new effort task.’

**Authors:** Stephanie Thomas, Feng Xie, Neil J. Buckley, David Cameron, Katherine Cuff, David Feeny, Jeremiah Hurley, Stuart Mestelman

**Abstract:** Objectives

This project investigates the viability of using virtual world environments for controlled laboratory investigations of health preferences and behaviours. We will observe whether participants exhibit a willingness to pay to avoid a reduction in their mobility in the virtual world. The key aim is to understand if a virtual world can provide sufficient context to prompt participants to make health related decisions and to learn more about the use of such environments.

**Methods**

- **Health is multi-dimensional.** In this study we implement a reduction in a single dimension of health - mobility. Human participants undertake a task in a virtual world environment (a computer game) for which they can earn cash and experience a limitation in their mobility. We impair mobility by reducing the speed that participants can walk, disrupting the ability to carry out the task and earn income. Participants engage in the task over 6 ‘days’ (treatment periods) each of which lasts 4 minutes and use a standard gaming controller to interact with the environment. We compare the effect of different levels of impairment using a between participants design.

We also investigate choices over treatment options which fully restore health (with complete certainty). We allow participants to pay for instant care or to wait for free care. In both cases, costs are increasing in the amount of healthy time gained from medication. If participants are purely earnings maximizers there is an optimal time within each day to obtain medication. Taking the medication at the optimal time balances the costs and benefits of treatment and involves remaining in the ill state for a portion of time.
Participant preferences for better mobility in the virtual environment are thus reflected in the timing of their decisions to obtain this medication, with earlier treatment indicating a willingness to pay for medication in excess of the higher returns gained from in the unimpaired state.

Results

So far we have run two ‘pre-pilot’ studies in which we gathered feedback about our virtual world from participants and incorporated updates to the our programming. In those studies we observed that some participants chose to obtain treatment immediately and stated in post-study interviews that they did not care about the cost of treatment and found the impairment to be disruptive. In October 2018 we will implement our experiment again and compare responses between two groups of individuals, with each group defined by the degree of impairment they experience. The salience of our impairment will be revealed by the timing of treatment decisions. If those participants who experience greater impairment are less likely to choose the earnings maximizing treatment time then we can infer that the impairment has additional impacts, beyond lost earnings, and can potentially infer the willingness to pay to avoid time spent with impaired mobility.

This work forms a preliminary study of the effectiveness of virtual worlds for investigating health related decisions. We hope to be able to comment on the viability of such environments for behavioural and experimental health research, to share insights about the experience of developing such an environment, and to gain insightful feedback from participants at the workshop at a relatively early stage of research.

• Robert Schmidt. ‘Identifying the Distribution of Focal Points in Coordination Games on the Individual Level.’

Abstract: We propose a modified Keynesian beauty contest that allows eliciting the distribution of focal points in coordination games on the individual level. We modify the classical Keynesian beauty contest such that individuals have the possibility to allocate points to the available options. This enables subjects to invest in several of the available options and it allows weighing their choices, which in turn reveals the ranking of focal points. We theoretically derive predictions for coordination outcomes and show that subjects should reveal their personal ranking of how focal they
evaluate the different options, provided that two assumptions regarding risk attitude and belief structure are met. In an experiment on the elicitation of social norm perception, we compare the proposed mechanism with the approach by Krupka and Weber (2013), who use the classical beauty contest setting. Our data confirms the predictions and demonstrates that the proposed technique is suited to measure the distribution of focal points in coordination games on the individual level. Finally, using simulations, we find that the technique is more efficient in the sense that it converges faster to the underlying distribution of focal points and identifies the modal focal point with higher confidence for a given number of subjects.

• Theodore Turocy. ‘A demonstration and comparison of estimation methods for quantal response equilibria in games.’

Abstract: I demonstrate how to use the facilities in the Gambit software package to estimate parameters for logit quantal response equilibria (QRE). I compare two methods for estimation: one which solves the fixed-point problem for QRE, which is computationally time-consuming for large games, versus a recently-proposed alternative which uses a rational-expectations approach to avoid the fixed-point problem. I show that the rational-expectations approach is biased, in that the estimates logit precision parameter lambda (in the terminology of McKelvey-Palfrey 1995) are systematically too small, implying best-response behaviour is less precise than it actually is.

• Xu Yan. ‘Top-Flop Betting: An incentive mechanism to elicit unverifiable truths.’

Author: Aurelien Baillon

Abstract: This paper introduces a simple mechanism to incentivize truth-telling even when the underlying truth is unverifiable. Most similar mechanisms in the literature rely on the existence of a common prior about the distribution of possible answers and on Bayesian arguments. In our mechanism, respondents to a question bet on the answers of others, relative to the answers given to other questions. For instance, people are asked to bet whether they think a given movie will get higher ratings than another, random movie. The bet reveals whether people themselves liked the movie. We call this method "top-flop betting" and show that it provides incentives to truthfully reveal private information, even in the presence of biases in the
answers the bets are based on. Unlike existing methods, our method (i) relaxes assumptions on common prior; (ii) is robust to risk aversion and certainty effects, basically requiring first-order stochastic dominance only; (iii) leads to truth-telling as dominant in individual setting and a Bayesian equilibrium in game setting (not needing a Bayesian Nash equilibrium)

Session Topic: Bounded Rationality (Room 001A)

- **Hanh Tong.** ‘Individual Heterogeneity in Traveler’s Dilemma.’
  
  **Authors:** David Freeman and Hanh Tong  
  
  **Abstract:** We study individual heterogeneity in decision rules and levels of strategic thinking, using Traveler’s Dilemma. In our within-subject design, subjects make choices in three blocks of ten of the Traveler’s Dilemma game without feedback. In line with previous studies, we find a statistical negative effect of the reward ‘penalty on subject’s claims. Second, there are three spikes in the relative frequency of choices at exact upper bound, exact middle and exact lower bound, which account for around 50% of the total number of choices. Third, variations of Nash, Quantal Response Equilibrium, and Level-k do not fit the aggregate data well. Fourth, we compare the performance of leading models from behavioural game theory at the individual level.

- **Ada Kovaliukaite.** ‘The Predictive Success of Theories of Strategic Thinking: A Non-parametric Evaluation.’
  
  **Authors:** David Rojo Arjona, Daniel E. Fragiadakis and Ada Kovaliukaite  
  
  **Abstract:** Theories of non-equilibrium strategic thinking (e.g. Level-k and Cognitive Hierarchy) intend to describe how individuals actually behave. But how much of their descriptive accuracy is driven by being more permissive theories? We modify Selten [1991] axiomatic measure of predictive success to ensure individual consistency. By applying restrictions over observables to the individual data (echoing the revealed preference literature), we test the necessary and sufficient conditions of these theories and quantify the economic losses for deviations from the theory. The non-parametric results are favourable for these theories and show that their predictive success is not mechanically due to their permissiveness.
• **Daniel Schunk.** ‘An Experimental Beauty-Contest Game with Children and Adults.’

**Authors:** Henning Hermes, Daniel Schunk

**Abstract:** We develop a new method to measure strategic interaction with children, using an adapted form of the experimental beauty-contest game (BCG). We test the design of the game in a study in schools with 114 children aged 9’11 years. In addition, we collected measures on cognitive and empathy skills to identify determinants of successful performance in the game. Results demonstrate that children in this age group are indeed capable of strategic interaction. While cognitive skills, measured as fluid IQ, are not related to performance in the BCG, behavioral indicators of empathy skills are strong predictors for successful strategic interaction. We validate our findings using a standard student sample playing the new form of the experimental BCG and show that their results are in line with classical forms of the BCG. Our findings emphasize the importance of socio-emotional skills, namely empathy skills, for strategic interaction and, more generally, economic decision-making.

• **Konrad Grabiszewski.** ‘Tree construction and backward induction: a mobile experiment.’

**Authors:** Konrad Grabiszewski and Alex Horenstein

**Abstract:** Game theory is a collection of tools to analyze interactive situations. We focus on two fundamental tools employed in the context of dynamic games: tree construction (modeling reality in its simplified form) and backward induction (solving the tree in terms of strategy profiles). We ask whether these tools work; that is, whether people behave as if they were constructing trees and backward inducting. We find that sometimes these tools work and proceed to explain when and why they fail. We find two key forces: subject’s skills and complexity of interaction. We show how to measure skills and complexity. We also analyze the relationship between the structure of interaction and its complexity. Finally, we compare the relative importance of skills and complexity in terms of increasing the likelihood of subjects constructing a tree and backward inducting. In order to collect the data, we conduct a mobile experiment: we developed the mobile game Blues and Reds that is available for free for both iOS and Android devices.