



# The 18th International Conference on Social Dilemmas

June 3~7, 2019 | Sedona, AZ  
Hilton Sedona Resort at Bell Rock







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# ICSD Agenda June 3-7, 2019

Time	Monday, June 3	Tuesday, June 4	Wednesday, June 5	Thursday, June 6	Friday, June 7
7:30-8:30am		Breakfast Oak Creek Canyon/Canyon Patio	Breakfast Oak Creek Canyon/Canyon Patio	Breakfast Oak Creek Canyon/Canyon Patio	Breakfast Oak Creek Canyon/Canyon Patio <b>Business Meeting @ 8:00am</b> Canyon Ballroom A
8:30-8:45am		Welcome and Opening Canyon Ballroom A			
8:45-10:30am		Session 1 Canyon Ballroom A	Session 4 Canyon Ballroom A	Session 7 Canyon Ballroom A	Session 9 Canyon Ballroom A
10:30-11:00am		Morning Coffee Break Canyon Ballroom B	Morning Coffee Break/ Poster Presentations Canyon Ballroom B	Morning Coffee Break Canyon Ballroom B	Morning Coffee Break/ Poster Presentations Canyon Ballroom B
11:00am-12:30pm		Session 2 Canyon Ballroom A	Session 5 Canyon Ballroom A	Session 8 Canyon Ballroom A	Session 10 Canyon Ballroom A
12:30-2:30pm		Lunch (On Your Own)	Lunch (On Your Own) / ICSD Board Meeting		Lunch (On Your Own)
2:30-4:00pm	Registration 2:30-5:00pm Prefunction Foyer	Session 3 Canyon Ballroom A	Session 6 Canyon Ballroom A	Social Afternoon Crescent Moon Ranch *Lunch Included* Transportation provided. Please arrive in the hotel lobby at 12:45pm.	Session 11 Canyon Ballroom A
4:00-4:30pm		Afternoon Break Canyon Ballroom B	Afternoon Break/ Poster Presentations Canyon Ballroom B		Afternoon Break/ Poster Presentations Canyon Ballroom B
4:30-6:00pm	Welcome Reception 5:30-7:30pm Porch Lawn A & B *Hors d'oeuvres & Drinks Included*	Keynote Address- <i>Marco Janssen</i> - Conditions for self-governance of the commons	Memorial Session- Celebrating the Life and Work of <i>Toshio Yamagishi</i>		Keynote Address- <i>Anna Dornhaus</i> - Communication to the greatest individual and group level effect: lessons from insects
6:00-6:30pm					
6:30-8:30pm		Dinner (On Your Own)	Dinner (On Your Own)/ Board Dinner	Dinner (On Your Own)	Closing Party by the Pool Hilton eforea Spa Pool *Dinner Included*

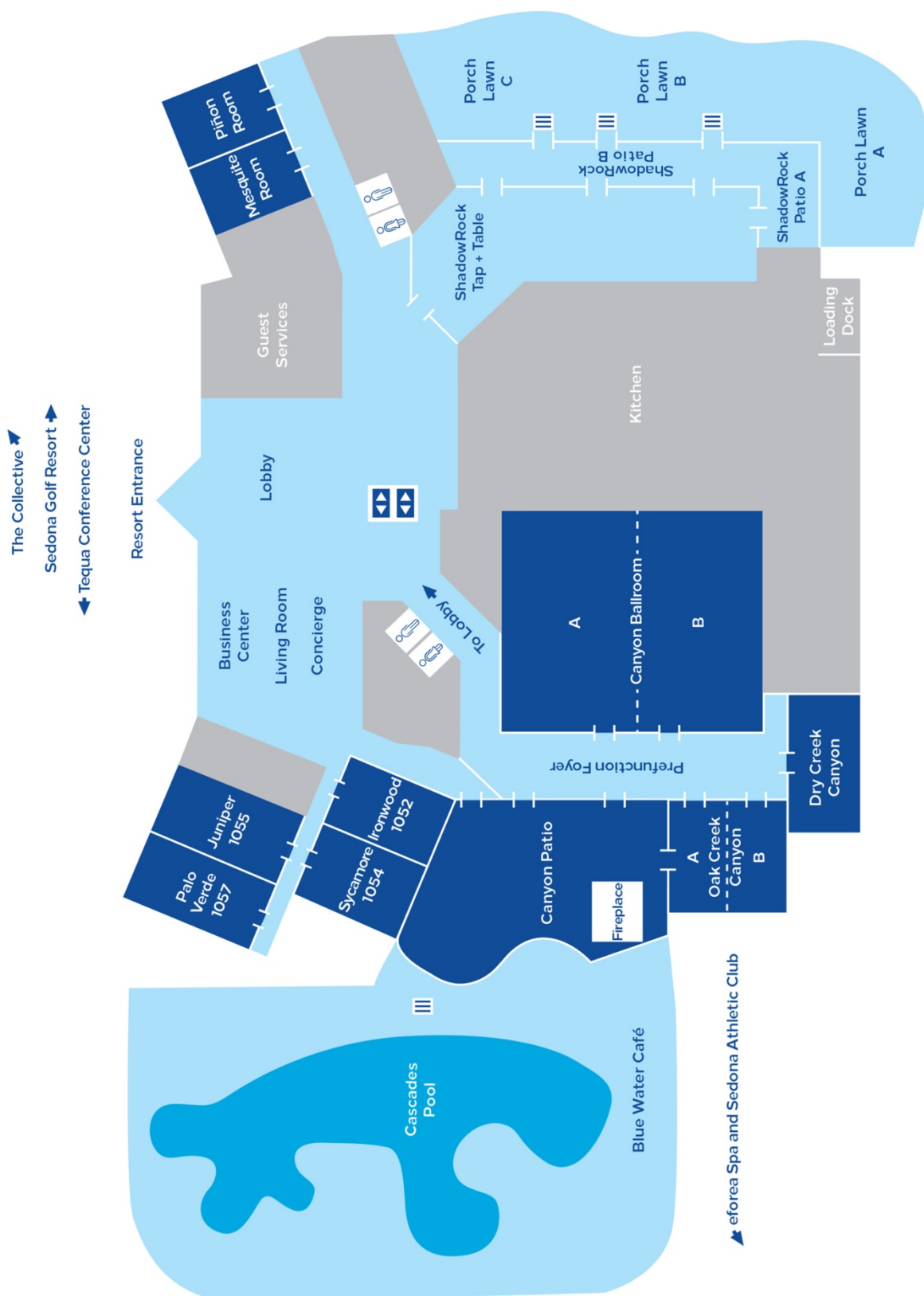
Posters will need to be set up by 8:00am in Canyon Ballroom B on the day assigned. Breakdown will take place at 6:00pm the same day. Presentations will take place during morning and afternoon breaks.



**FLOOR MAPS KEY**

- Conference/Event Rooms
- Amenities
- Public Space
- Private

- FLOOR MAPS KEY**
- Conference/Event Rooms
  - Amenities
  - Public Space
  - Private



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# Hilton

## SEDONA RESORT AT BELL ROCK



## Tuesday, June 4, 2019

### Session 1 (Punishment)

Chair: Poonam Arora

8:45-9:00am	<b>Charles Noussair</b> - Covenants before the swords: Normative conflict and cooperation in heterogeneous groups
9:00-9:15am	<b>Catherine Molho</b> - Direct and Indirect Punishment in Daily Life
9:15-9:30am	<b>Welmer Molenmaker</b> - Human cooperation and peer punishment in diversified groups
9:30-9:45am	<b>Mathias Twardawski</b> - The motivational basis of third-party punishment in children
9:45-10:00am	<b>Junhui Wu</b> - Group Size and Cooperation: The Effects of Punishment and Reputation-Based Partner Choice
10:00-10:15am	<b>Yoko Kitakaji</b> - The effect of punishment on cooperation in the nested social dilemma
10:15-10:30am	<b>Dorothee Mischkowski</b> - Punishing social (un-)mindfulness

### Session 2 (Ethics and Morality)

Chair: Tamar Kugler

11:00-11:15am	<b>Jeff Joireman</b> – Who Moved My Donation? Betrayal of Moral Mandates Predicts Negative Responses to Redirected Donations to Peer-to-Peer Charities
11:15-11:30am	<b>Timothy Shields</b> - Moral Sentiments, and the Self-Regulation of Management Behavior
11:30-11:45am	<b>Amos Schurr</b> - The effect of defaults in autonomous vehicles on moral appraisals
11:45am-12:00pm	<b>Denton Hatch</b> - Prosocial Behavior from Unethical Behavior: The Role of Guilt, Positive Affect, and System Processing
12:00-12:15pm	<b>Marilynn Brewer</b> - The moral significance of a resource increases conservation behavior
12:15-12:30pm	<b>Yuval Rottenstreich</b> - Principled Defection: On Caring that Fails to Activate and Non-Cooperative Behavior

### Session 3 (Social Dilemmas)

Chair: Robert Böhm

2:30-2:45pm	<b>Nir Halevy</b> - Strategic Thinking: An Instrument for Good or Bad?
2:45-3:00pm	<b>Daniil Serko</b> - Keeping one's word is not the exception, it's the rule
3:00-3:15pm	<b>Sebastian Grueneisen</b> - Children delay gratification for cooperative goals: A joint marshmallow task with German and Kenyan children
3:15-3:30pm	<b>Cathleen Johnson</b> – The Jamestown Survival Game
3:30-3:45pm	<b>Jieyu LV</b> - Can empathy promote dyadic cooperation with strangers, when there is inequality of resources involved
3:45-4:00pm	<b>Eva Krockow</b> - Antimicrobial resistance: a social dilemma problem?

## Wednesday , June 5, 2019

### Session 4 (Gossip, Generalized and Social Exchange)

Chair: Poonam Arora

8:30-8:45am	<b>Francesca Giardini</b> - Combining partner choice and gossip to make cooperation sustainable in a Public Goods Game
8:45-9:00am	<b>Terence Dores Cruz</b> – Gossip in Daily Life
9:00-9:15am	<b>Toby Hanfield</b> - Gossip discrimination: A mechanism to stabilize cooperation in models of indirect reciprocity with endogenous norms
9:15-9:30am	<b>Brent Simpson</b> - Foundations of Generalized Exchange Systems
9:30-9:45am	<b>Kevin Durrheim</b> - Unpacking the contextual determinants of social exchange decisions. A simulation approach to fitting theory to data
9:45-10:00am	<b>Erik de Kwaadsteniet</b> - The Emergence of Latent Norms in the Repeated Volunteer's Dilemma: The Role of Social Preferences and Asymmetry
10:00-10:15am	<b>Nikoleta Glynatsi</b> - Stability of defection, optimization of strategies and testing for extortion in the Prisoner's Dilemma
10:15-10:30am	<b>Eitan Adres</b> - Social Dilemma of Ethnic Minority

### Session 5 (Sustainability)

Chair: Tamar Kugler

11:00-11:15am	<b>Sina Klein</b> - Sustainability competition as a means to promote pro-environmental behavior independently from cooperation
11:15-11:30am	<b>Andreas Diekmann</b> - Choosing Green Energy. A Social Dilemma with a Solution
11:30-11:45am	<b>Eric Cardella</b> - Green is Good – The Impact of Information Nudges on the Adoption of Voluntary Green Power Plans
11:45am-12:00pm	<b>Gwendolyn Tedeschi</b> - Impact of Political Beliefs on Intergenerational Environmental Dilemmas
12:00-12:15pm	<b>Yang Li</b> - Common knowledge and collective goal setting: How do they influence cooperation in a climate change system?
12:15-12:30pm	<b>Ryan Murphy</b> - Who cares about sustainable investing?

### Session 6 (Trust)

Chair: Robert Böhm

2:30-2:45pm	<b>Ilan Fischer</b> - Shaping each other's strategy in repeated PD games
2:45-3:00pm	<b>Eliran Halali</b> - Trust your gut: Intuitive mind-set enhances the quality of trustworthiness forecasts
3:00-3:15pm	<b>Boris Maciejovsky / David Budescu</b> – Too Much Trust in Group Decisions
3:15-3:30pm	<b>Bohan Ye</b> – On Trust and Disgust – Evidence from Face Reading and Virtual Reality
3:30-3:45pm	<b>Eric Scalone</b> - A Cross-Cultural Understanding of the Role of Trust, Social Norms and Context in Predicting Cooperation in Environmental Dilemma
3:45-4:00pm	<b>Jered Abernathy</b> - Bridging the Trust Gap between Partisans



## Thursday, June 6, 2019

### Session 7 (Bilateral Conflict, Institutions, Regulation)

Chair: Poonam Arora

8:30-8:45am	<b>Klarizze Puzon</b> - Regional identity and intergenerational resource conflict
8:45-9:00am	<b>Robert Böhm</b> - How Defaults Shape War and Peace
9:00-9:15am	<b>Hillie Aldering</b> - Parochial vs. universal cooperation: Introducing a novel economic game of within- and between-group interaction
9:15-9:30am	<b>Eyal Ert</b> - The Effect of Issue Linkage on Cooperation in Bilateral Conflicts: An Experimental Analysis
9:30-9:45am	<b>Alex Stewart</b> - Explaining Parochialism: A Causal Account for Political Polarization in Changing Economic Environments
9:45-10:00am	<b>Ori Weisel</b> - The complementarity of centralized and decentralized institutions in fostering cooperation
10:00-10:15am	<b>Thomas Sabitzer</b> - The social dilemma of sharing and the role of regulation
10:15-10:30am	<b>Davide Barrera</b> - Order with some law: Institutions moderate the effects of reputation in a cryptomarket for illegal drugs

### Session 8 (Game Theory)

Chair: Tamar Kugler

11:00-11:15am	<b>Hannes Rusch</b> - Shared Intentions: The Evolution of Collaboration in Symmetric 2x2-Games with Imperfect Recognition of Types
11:15-11:30am	<b>Darryl Seale</b> - Impacts of Correlated Preferences in Two-sided Matching: Computer Simulations of the Stable Marriage Problem
11:30-11:45am	<b>Senran Lin</b> - Regret Games
11:45am-12:00pm	<b>Bryan Bruns</b> - Inequality Increases in the N-Person Topology of Games
12:00-12:15pm	<b>Athena Aktipis</b> - Smartphone use as a Stag Hunt Game: Do smartphones create a coordination problem for face-to-face interaction?
12:15-12:30pm	<b>Jurgis Karpus</b> - The future of human-AI coordination

## Friday, June 7, 2019

### Session 9 (Cooperation and Prosocial Behavior)

Chair: Poonam Arora

8:45-9:00am	<b>Isabel Thielman</b> - Personality and Prosocial Behavior: A Meta-Analysis
9:00-9:15am	<b>Joshua Tybur</b> - Willingness to share infectious physical contact tracks other-regarding social preferences
9:15-9:30am	<b>Simon Columbus</b> - Interdependence and Cooperation in Daily Life
9:30-9:45am	<b>Daniel Balliet</b> - The Cooperation Databank (CoDa)
9:45-10:00am	<b>Martin Kocher</b> - Cooperation in a company: A large-scale experiment
10:00-10:15am	<b>Joanna Bryson</b> - Game Technology as an Intervention for Public Understanding of Social Investment
10:15-10:30am	<b>Yasuyuki Kudo</b> - Methodology for Modeling the Probability of Cooperative Action in Various Social Dilemmas

### Session 10 (Cross Culture)

Chair: Tamar Kugler

11:00-11:15am	<b>Adam Stiver</b> - The Control Orientations Inventory: Concurrent Validation in the US, Poland, and Japan
11:15-11:30am	<b>Angelo Romano</b> - Parochial Cooperation and Reciprocity Across 42 Societies
11:30-11:45am	<b>Giuliana Spadaro</b> - Cross-societal variation in cooperation: A meta-analytic approach
11:45am-12:00pm	<b>Paul van Lange</b> - Are Tendencies to Inequality Aversion Universal?
12:00-12:15pm	<b>Niels van Doesum</b> - Social mindfulness across the globe
12:15-12:30pm	<b>Jennifer Anderson</b> - The Social Dilemma that is American Society

### Session 11 (Ethnicity and Identity)

Chair: Robert Böhm

2:30-2:45pm	<b>Michael Quayle</b> - Group genesis in a novel two-mode model of opinion-based groups
2:45-3:00pm	<b>Ben Grodeck</b> - Cooperating with future generations: An experimental investigation of altruism in identity-affecting decisions
3:00-3:15pm	<b>Jimena Gonzalez-Ramirez</b> - Understanding Cooperation in a Populist Landscape
3:15-3:30pm	<b>Toko Kiyonari</b> - Salivary testosterone promotes dominance in the Ultimatum Game only when players' social rank is high



## **Poster Session 1 - 8:00am-6:00pm - Wednesday, June 5 - Canyon Ballroom B**

- 1. Cindy Schipani** - Mentoring in the #metoo Era
- 2. Eva Krockow** - Balancing the risks of antibiotic use: A systematic review and synthesis of qualitative research on antibiotic prescribing behavior
- 3. Misato Inaba** - Minimum requirement of metarule that solves the dilemma of endogenous institution formation
- 4. Andreas Diekmann** - Heterogeneous groups overcome the diffusion of responsibility problem in a sanctioning dilemma
- 5. Annika Nieper** - Power and Cooperation: A Meta-Analytic Review of Economic Games and Distributive Negotiations
- 6. Young-Eun Lee** - The influence of sharing experiences on third-party punishment in Children
- 7. Eizo Akiyama** - The effect of "dilemma" of the prisoner's dilemma game on the mental conflict, and conflict averting behavior
- 8. Lu Gram** - Towards an agent-based model of community mobilisation to prevent domestic violence in the slums of Mumbai
- 9. Senran Lin** - Why Do Firms Train? A Behavioral Explanation
- 10. Sherry Schneider** - Promoting Delay of Antibiotic Treatment by Influencing Collective Identity: Three Studies

## **Poster Session 2 - 8:00am-6:00pm - Friday, June 7 - Canyon Ballroom B**

- 1. Elena Wong** - Expanding the discourse surrounding sexual harassment: The case for considering experienced and observed hostile sexism, benevolent sexism, and gendered incivility
- 2. Rebecca MacGowan** - Examining Workplace Support for Breastfeeding Women at Work: A Fuzzy Set Approach
- 3. Rie Mashima** - The effect of opportunity cost on strategies to maintain long-lasting relationships
- 4. Yoshie Matsumoto** - Are cooperators more likely to attack outgroup members in a competitive situation than defectors?
- 5. Wakaba Tateishi** - The effect of universal institutions on intergroup cooperation
- 6. Jieyu LV** - Praising Your Partner Promotes Dyadic Cooperation
- 7. Ion Juvina** - Overcoming effort avoidance
- 8. Joanna Schug** - Expectations of ingroup favoritism in a faith game
- 9. Sosuke Okada** - When Donation is Seen as Suspect: the Effects of Signaling Environments on Charitable Giving and Trustworthiness



Session 1  
Tuesday, June 4<sup>th</sup>, 2019  
8:45~10:30am

**Time:** 8:45-9:00am

**Name:** Charles Noussair

**Paper Title:** Covenants before the swords: Normative conflict and cooperation in heterogeneous groups

**Co-authors:** Christian Koch, Nikos Nikiforakis

When agents derive heterogeneous benefits from cooperation, conflicting views about what constitutes appropriate behavior can impede their ability to cooperate. We study the ability of such heterogeneous groups to overcome this normative conflict in a public-good experiment, when individuals are provided with two instruments known to be highly effective at promoting cooperation in homogeneous groups: peer-to-peer communication and punishment. The findings indicate that communication enables most groups to establish covenants, i.e., agreements about individual contributions, while the threat of punishment (the ‘sword’) discourages deviations from the covenants. As a result, groups achieve the highest levels of cooperation and earnings when the two instruments are both available and act in tandem, although even then, they fall below the maximum. Covenants dramatically reduce the use of sanctions when communication is introduced before punishment, but not when they are implemented in the opposite order.

**Time:** 9:00-9:15am

**Name:** Catherine Molho

**Paper Title:** Direct and Indirect Punishment in Daily Life

**Co-authors:** Daniel Balliet, Joshua M. Tybur, Paul A.M. Van Lange

Direct, costly punishment is seen as a powerful mechanism to promote cooperation, deployed proportionately to the severity of offenses. Yet, field evidence suggests that people often prefer to use lower-cost, indirect strategies (e.g., gossip) to minimize retaliation costs. Here, we test pre-registered hypotheses about the influence of various situational, relationship, and emotional factors on preferences for direct versus indirect punishment in daily life. Participants ( $N = 257$ ) took part in a two-week daily diary study, where they reported moral offenses ( $k = 1,507$ ). In daily life, respondents engaged in more direct confrontation when they were personally targeted by others’ offenses, when they had higher power, and the more they valued their relationship with offenders. In contrast, they engaged in more indirect, gossip behaviors when offenses were more morally wrong and harmful, when they had lower power, the less they valued their relationship with offenders, and the more they experienced disgust.



**Time:** 9:15-9:30am

**Name:** Welmer E. Molenmaker

**Paper Title:** Human cooperation and peer punishment in diversified groups

**Co-authors:** Jörg Gross, Carsten K. W. de Dreu, Erik W. de Kwaadsteniet, Eric van Dijk

Peer punishment seems an important regulatory factor for the functioning of human societies. However, here we show experimentally that although peer punishment opportunities are effective in deterring free-riding in demarcated groups with uniform populations, the opportunity to punish peers does not deter free-riding in diversified groups with pluriform populations. Peer punishment opportunities allow and may invite individuals to apply double standards of cooperation and be psychologically reactant to punishments by members with whom they are less affiliated. We argue and demonstrate that this undermines the effectiveness of peer punishment in deterring free-riding and sustaining high levels of cooperation. Our results question the notion that peer punishment is an important regulatory factor for the functioning of human societies, as peer punishment opportunities only seem effective under very specific and rather artificial conditions.

**Time:** 9:30-9:45am

**Name:** Mathias Twardawski

**Paper Title:** The motivational basis of third-party punishment in children

**Co-authors:** Benjamin E. Hilbig

Young children willingly accept personal costs to sanction norm violations even if their sanctioning may not yield any future benefits—a behavior known as third-party punishment. However, little is known about the motives underlying third-party punishment in children. In two studies, we applied an information tracing paradigm (Study 1; N = 69) and a third-party punishment game (Study 2; N = 238) measuring the punishment goals pursued by children around the ages of 10 and 11. Specifically, we were interested in the extent to which their punishment was driven by retribution (i.e., evening out the harm caused), special prevention (i.e., preventing recidivism of the offender), and general prevention (i.e., preventing imitation of others). We consistently found that children's punishment is predominantly motivated by both retributive and preventive purposes. Specifically, special prevention appeared to be as important as retribution whereas general prevention was only of importance in the economic game.

**Time:** 9:45-10:00am

**Name:** Junhui Wu

**Paper Title:** Group Size and Cooperation: The Effects of Punishment and Reputation-Based Partner Choice

**Co-authors:** Daniel Balliet, Leonard S. Peperkoorn, Angelo Romano, Yu Kou, Paul A. M. Van Lange

Drawing on indirect reciprocity and gene-culture coevolutionary perspectives, we derived and tested competing hypotheses that reputation-based partner choice, as well as punishment, promotes cooperation more or less effectively in larger (vs. smaller) groups. Prior work recognizes that the incentives for cooperation shift with group size, so we first tested how group size affects cooperation when temptation (extra benefits from noncooperation over cooperation) or gain (extra benefits from universal cooperation over universal noncooperation) varies. Two studies ( $N = 1,952$ ) revealed that when temptation increased with group size, 20-person groups were less cooperative than 4-person groups, and this was explained by reduced expectations of others' cooperation, less perceived collective efficacy, and greater perceived conflict. However, 40-person and 4-person groups did not vary in cooperation. Importantly, reputation-based partner choice and punishment invariably promoted cooperation in groups of different sizes, suggesting that these two solutions robustly promote cooperation across groups from small to large.

**Time:** 10:00-10:15am

**Name:** Yoko Kitakaji

**Paper Title:** The effect of punishment on cooperation in the nested social dilemma

**Co-authors:** Misato Inaba

We investigated the effect of punishment in a nested social dilemma. In the social dilemma, there is a trade-off between individual interests and collective interests, but it is possible to increase cooperation by sanctioning noncooperators. In a nested social dilemma, balance is maintained among individual, subgroup, and collective interests. Therefore, the effect of punishment will vary depending on whether people aim for subgroup cooperation or collective cooperation. We conducted the repeated nested social dilemma game in a group of 6 people consisting of 2 subgroups of 3 people. Noncooperative behavior decreased when punishment was available. However, although some groups achieved mutual collective cooperation, the other groups realized mutual subgroup cooperation. Participants who cooperated within the larger group were punished in the groups in which mutual subgroup cooperation was achieved. Our results indicate that there are 2 kinds of macro cooperative patterns depending on who is punished in the group.



**Time:** 10:15-10:30am

**Name:** Dorothee Mischkowski

**Paper Title:** Punishing social (un-)mindfulness

**Co-authors:** Andreas Glöckner, Carola Ortlepp-Appl, Tillmann Nett

We investigate whether the threat of being punished influences non-costly pro-sociality as measured by the construct social mindfulness (Van Doesum, Van Lange & Van Lange, 2013). Specifically, we test whether and how the tendency to behave in a socially mindful manner can be increased by the anticipation of various forms of punishment. Results of two online studies and a lab experiment (N total > 650) confirm that social mindfulness increases with the inclusion of a threat of being punished. This shows that social mindfulness is context dependent and influenced by punishment in a similar manner as cooperation behavior in monetary games.





Session 2  
Tuesday, June 4<sup>th</sup>, 2019  
11:00am~12:30pm

**Time:** 11:00-11:15am

**Name:** Jeff Joireman

**Paper Title:** Who Moved My Donation? Betrayal of Moral Mandates Predicts Negative Responses to Redirected Donations to Peer-to-Peer Charities

**Co-authors:** Mark Mulder, Yany Grégoire, David E. Sprott

While research identifies predictors of charitable giving, little is known about what happens after the donation. Accordingly, the present work examines how consumers respond when they learn their donation to a peer-to-peer (traditional) charity such as donorschoose.org (unitedway.org) has been used for a project the donor did not select (prefer). Highlighting the dark side of charitable giving, the present work conceptualizes redirected donations as a service failure within a betrayal-based framework. Consistent with the proposed framework, three studies demonstrate that redirected donations (1) increase perceived betrayal, which leads to lower future donation intentions and volunteering, and heightened negative word of mouth intentions and switching charities; and (2) the sense of betrayal is magnified when the charity has a moral mandate to carry out the advertised project (i.e., the charity is a P2P vs. a traditional charity and the project is seen as more vs. less morally imperative).

**Time:** 11:15-11:30am

**Name:** Timothy Shields

**Paper Title:** Moral Sentiments, and the Self-Regulation of Management Behavior

**Co-authors:** Greg Waymire, Radhika Lunawat

We experimentally test the hypothesis that financial reporting generates economic value even when managers' wealth is not tied to reported earnings. The mechanism propelling our hypothesis is human morality where conscientious managers seek to "do right" by investors whose investments are necessary to enable the firm's profit-seeking activity. Adam Smith represents this internal force as an "Impartial Spectator" internalized through social interactions that allow us to identify when others judge our behavior as praise or blame-worthy. Smith's conjecture describes the mechanism at work in Brandeis' famous assertion that transparent corporate reporting provides "sunlight" to serve as "the best of all disinfectants." Our experimental evidence suggests that total wealth generated, the propensity of managers to reinvest resources, and share profits with investors are greater when reporting is present. This evidence suggests that the value of financial reporting arises in part because it implicates moral sentiments in managers that ultimately benefit of investors.

**Time:** 11:30-11:45am

**Name:** Amos Schurr

**Paper Title:** The effect of defaults in autonomous vehicles on moral appraisals

**Co-authors:** Simone Moran, Clil Uliel

As use of automation technologies grows, defaults play an increasing role in our lives. Focusing on the case of autonomous vehicles (AVs) we explore the role of defaults in determining perceived morality of drivers in AVs vs. regular cars who face an unavoidable accident and perform the same action. In four experiments, we find people have different (in)action expectations from drivers in autonomous versus regular vehicles, and subsequently evaluate drivers' utilitarian decisions to swerve and hit one instead of five individuals as more moral when they involve overriding AVs' defaults than when driving regular cars. Importantly, the more favorable appraisals of AV drivers were apparent even when controlling for perceived responsibility for getting into the unavoidable accident situation, and were found to occur because people regard unexpected acts of overriding a default as more intentional and as taking greater responsibility over the situation, than merely acting as expected

**Time:** 11:45am-12:00pm

**Name:** Denton Hatch

**Paper Title:** Prosocial Behavior from Unethical Behavior: The Role of Guilt, Positive Affect, and System Processing

**Co-authors:** Tamar Kugler

Prosocial behaviors are common in organizations. As such, we are interested in uncovering how acting unethically affects the actor's consequential prosocial behavior. The existing literature shows inconsistent effects; some find that unethical behavior leads to an increase in prosocial behavior, while others find an opposite relationship. We suggest that dual processing theory can explain these opposing behavioral reactions due to felt emotions after acting unethically. Specifically, we argue that System 1 processing leads individuals acting unethically to experience guilt and engage in more future prosocial behavior, while System 2 processing leads to an increase in positive affect and a decrease in prosocial behavior. We test this model in an experimental study, which manipulates both unethical behavior and cognitive processing, and find support for the moderated, dually mediated process. Overall, these results help to identify how and when unethical behavior will lead to future prosocial behavior.



**Time:** 12:00-12:15pm

**Name:** Marilyn Brewer

**Paper Title:** The moral significance of a resource increases conservation behavior

**Co-authors:** Brock Bastian, Paul van Lange

Incentives to cooperate or defect in a commons (resource) dilemma are usually specified in terms of the monetary value of the shared resource. With a focus on financial costs and benefits, behavioral studies have generally neglected the potential role of the non-monetary value attached to a limited and depletable resource. Across two behavioral experiments we demonstrate the effect of attaching non-monetary value (moral significance) to a resource within a resource dilemma game. When players believed that exhausting a resource would lead to the immediate death of live crickets they reduced personal consumption significantly, relative to players given the standard instructions about the monetary value of the shared resource. Adding moral significance to the depletion of the resource enhanced the motivation to preserve it regardless of the financial cost.

**Time:** 12:15-12:30pm

**Name:** Yuval Rottenstreich

**Paper Title:** Principled Defection: On Caring that Fails to Activate and Non-Cooperative Behavior

**Co-authors:** Johannes Müller-Trede

Many theories identify selfishness and lack of caring about others as the fundamental impediments to cooperation. We highlight a different source of non-cooperative behavior: people's caring may be abundant but fail to activate. We present an attribution-based model in which individuals may treat others well out of genuine kindness or tactical self-interest. The model formalizes the notion that when people construe positive treatment they receive as "just business" (i.e., tactics), their caring remains dormant, and they do not reciprocate. However, when they interpret positive treatment as genuinely kind, their caring is activated, and they may reciprocate. We term non-reciprocity engendered by attributions of tactical motives "principled defection" and experimentally corroborate its prevalence. Our work indicates that extant research underestimates people's taste for reciprocity. It yields novel perspectives on generosity in ultimatum games and on unraveling. It offers an alternative explanation for data cited as support for the social heuristics hypothesis.

Session 3  
Tuesday, June 4<sup>th</sup>, 2019  
2:30~4:00pm

**Time:** 2:30-2:45pm

**Name:** Nir Halevy

**Paper Title:** Strategic Thinking: An Instrument for Good or Bad?

**Co-authors:** Shilaan Alzahawi, Jennifer Dannals

Strategic thinking—one's tendency to deliberate about how actors' choices influence their own and others' outcomes—is an important mental facility. Like any tool (e.g., language, physical strength), it can be used for good or bad, to help or hurt. We introduce and validate a novel self-report measure of strategic thinking and explore strategic thinking's nomological network, with a particular focus on its social and moral meaning. We find that strategic thinking correlates positively with self-transcendence values (benevolence and universalism), interpersonal responsiveness (empathy and perspective-taking), and a communal interpersonal orientation. Further, individuals attribute greater morality and warmth to others who engage in deep rather than shallow strategic thinking. These findings concerning lay understanding of strategic thinking suggests people commonly experience and associate contemplating about interdependence with prosocial rather than Machiavellian tendencies. We discuss the implications of strategic thinking in negotiations as well as for managing interactions and relationships.

**Time:** 2:45-3:00pm

**Name:** Daniil Serko

**Paper Title:** Keeping one's word is not the exception, it's the rule

**Co-authors:** Patricia Kanngiesser, Jan K. Woike

Promises play an important role in boosting cooperation – even in social dilemma situations. However, it is unclear whether promises are effective because of the promise per se or because mainly more cooperative people communicate their intentions via promises. Here, we present a series of studies (online and in the field) on people's promise keeping behavior using a newly developed, incentivised paradigm without strategic interaction. Participants (total  $N=4,405$ ) could choose between (a) a smaller and (b) a higher amount of money under the condition that they promised to pay back some money later. A control condition presented the same options but without the promise. We find across studies that the majority of people kept their word to pay back money and did so more often than in control conditions. Voluntary promises thus have a strong normative force and may be useful interventions to induce behavioural change in a way that respects individual autonomy and decision making.



**Time:** 3:00-3:15pm

**Name:** Sebastian Grueneisen

**Paper Title:** Children delay gratification for cooperative goals: A joint marshmallow task with German and Kenyan children

**Co-authors:** Rebecca Koomen, Esther Herrmann

Cooperation frequently requires individuals to delay gratification – to invest effort to achieve joint long-term goals while disregarding short-term temptations. However, capacities for delaying gratification – while widely studied in developmental psychology – have never been examined in the context of cooperative decision-making. Here, we presented pairs of German and Kenyan children (N=206) with a modified version of the famous “marshmallow test”. In a baseline Solo condition, each child received a cookie and if they refrained from eating it until an experimenter returned they received a second cookie. In the Interdependence condition children’s outcomes were linked: they received a second cookie only if both waited but not if either of them ate their cookie before the experimenter returned. Children in both cultures were less likely to eat in the Interdependence than in the Solo condition ( $p=.008$ ) suggesting that they are more proficient at delaying gratification for cooperative ends than for individualistic goals.

**Time:** 3:15-3:30pm

**Name:** Cathleen Johnson

**Paper Title:** The Jamestown Survival Game

**Co-authors:** Charles A. Holt, Madison Smithers

Players in this game have individual-specific skills that determine that determine their productivities for high and low effort production. Each player must decide whether to expend high effort on a project that corresponds to work in a common field, or whether to allocate low effort to the group project and dedicate their high effort to private production. The effort allocations to the common field, whether high or low, determine the joint production that is shared equally, whereas effort expended after hours in private production is not shared. After each production period, a random event determines a survival threshold, and those who fall below are removed from the game prior to the next production season. The paper reports results of a laboratory experiment that considers the effects of high and low survival thresholds and how decisions are related to risk aversion measures using an “ink bomb” task. Outcomes are discussed in terms of comparisons with the experience in the Jamestown and Plymouth colonies, and with similar events more recently in China before privatization initiatives.

**Time:** 3:30-3:45pm

**Name:** Jieyu LV

**Paper Title:** Can empathy promote dyadic cooperation with strangers, when there is inequality of resources involved.

**Co-authors:** -

Does empathy-induced altruism promote dyadic cooperation with strangers when individuals were obsessed with equal resources and unequal resources? To address this question, three laboratory experiments are designed to examine whether empathy induction promotes dyadic cooperation with strangers. These experiments indicated that empathy promotes cooperation when a sense of fairness maintains; empathy only works effectively towards a specific field of cooperative behaviour. This study will extend empathy-altruism hypothesis and fairness heuristic theory.

**Time:** 3:45-4:00pm

**Name:** Eva M. Krockow

**Paper Title:** Antimicrobial resistance: a social dilemma problem?

**Co-authors:** Andrew M Colman, Edmund Chattoe-Brown, Carolyn Tarrant

Antimicrobial resistance (AMR) is one of the greatest threats in 21st century medicine. AMR has been characterised as a social dilemma. A familiar version describes the situation in which a public good (in this case, antibiotic efficacy) is exhausted due to over-exploitation. The dilemma arises because individuals are motivated to maximise individual payoffs, although the collective outcome is worse if all act in this way. In the case of antibiotic use, the dilemma is further complicated by the lack of visibility of AMR and the agency relationships inherent in the prescriber role. Consequently, only an adapted theory of social dilemmas can provide an integrative framework to characterise antibiotic overuse fully. Drawing on different theoretical perspectives and on empirical data collected across three different countries (South Africa, Sri Lanka and UK), this talk will discuss different strategies for shifting prescriber behaviour and promoting a focus on the collectively desirable outcome of conservation of antibiotic efficacy.



## **Keynote Address: Conditions for Self- governance of the Commons** by Marco Janssen

**Introduced by Poonam Arora**

**Marco Janssen** | *Professor of Sustainability and Director of the Center for Behavior, Institutions and the Environment, Arizona State University*

Marco Janssen is a professor in the School of Sustainability at Arizona State University, USA. He is also the director of the Center for Behavior, Institutions and the Environment at the same university, and the president of the International Association for the Study of the Commons. His main research interests are in the study of conditions for effective self-governance of shared resources using field case study analysis, field and lab experiments and mathematical modeling. His recent research projects include water management in Mexico City; small-scale irrigation communities in India, Thailand, Nepal, China and Colombia; lake governance in Wisconsin; and collaboration with artists to study collective action in extreme resource-scarce conditions.

### **Conditions for Self-Governance of the Commons**

Commons dilemmas have been a source of controversy for decades. The essay of Garrett Hardin on the Tragedy of the Commons implicated the need for external interventions by privatization or governmental regulations to avoid overexploitation. However, Elinor Ostrom and her colleagues have provided a broader theoretical framework that can explain the many observations of successful self-governance of shared resources. Experimental research demonstrated the importance of cheap talk and altruistic punishment as mechanisms of self-governance. In this talk, insights from recent lab and field experiments are discussed to derive a better understanding of the conditions for successful governance, especially the role of procedural justice, as well as use of games as intervention tools to stimulate self-governance.





Session 4  
Wednesday, June 5<sup>th</sup>, 2019  
8:30~10:30am

**Time:** 8:30-8:45am

**Name:** Francesca Giardini

**Paper Title:** Combining partner choice and gossip to make cooperation sustainable in a Public Goods Game

**Co-authors:** Daniele Vilone, Jose-Luis Estevez Navarro, Marijtje Van Duijn, Anxo Sanchez

When there is an opportunity to gain a positive reputation, individuals are more willing to sacrifice their immediate self-interest, and to behave cooperatively. Evolutionary models of cooperation pose that reputation-based partner choice can be an alternative to indirect reciprocity and experimental studies show that gossip can effectively support cooperation in Public Goods Game. However, these studies overlook the fact that gossip can be completely unreliable. Gossipers would have incentives to deceive receivers about the social world in ways that benefit the signaller, thus derogating rivals and masking their faults. Also, noise and unintentional errors are unavoidable features of information transmission, thus raising further doubts about the efficacy of gossip in sustaining cooperation. In this experimental study, we use a combination of PGG and gossip rounds with and without partner selection in order to test to what extent gossip can sustain cooperation and remain honest when participants can manipulate both the content and the source of information.

**Time:** 8:45-9:00am

**Name:** Terence Dores Cruz

**Paper Title:** Gossip in Daily Life

**Co-authors:** Daniel Balliet, Paul van Lange, Isabel Thielmann, Bianca Beersma

Gossip is ubiquitous in human societies and argued to be fundamental for human groups by enabling large-scale cooperation in systems of indirect reciprocity. Despite gossip's importance, a description of the phenomenon of gossip in its natural setting is lacking. In an experience sampling study, 305 participants reported on gossip in daily life four times a day for ten days (9952 observations), describing and evaluating the shared information and involved parties. Rigorously observing real-world gossip instances and dynamics allows us to understand better the phenomenon theories about gossip should explain and can address (a) where in people's social networks they gossip, (b) to what extent people believe gossip, (c) how the content of gossip portrays the target, (d) how relationship qualities between the sender, receiver, and target of gossip relate to gossip content, (e) how gossip content relates to behavioral intentions towards the target and sender, and, (f) what motivates gossip.

**Time:** 9:00-9:15am

**Name:** Toby Handfield

**Paper Title:** Gossip discrimination: A mechanism to stabilize cooperation in models of indirect reciprocity with endogenous norms

**Co-authors:** Jason Xu, Julián García,

Indirect reciprocity as a mechanism to promote cooperation requires a coding system for assigning reputations based on past behavior -- what we call a "social norm". Most existing models assume all agents adopt a uniform norm, modelled as an exogenous parameter. In this study we model norms as endogenous, allowing them to evolve freely. We first show that this makes indirect reciprocity unable to promote cooperation, because random drift permits nonsensical norms to invade, destroying the quality of reputation information. We then extend our model to allow agents to discriminate on the basis of "gossip discrimination". In this mechanism, motivated by recent work on the psychology of moral outrage in online social networks, agents compare evaluations of a hypothetical or past encounter, and discriminate against those who evaluate differently. The resulting mechanism stabilizes cooperative norms and sustains significantly higher levels of cooperation.

**Time:** 9:15-9:30am

**Name:** Brent Simpson

**Paper Title:** Foundations of Generalized Exchange Systems

**Co-authors:** Ashley Harrell, David Melamed, Nicholas Heiserman, Daniela Negraia

Researchers often study the spread of prosocial behavior as generalized exchange systems. Prior work identifies two processes that govern prosociality in generalized exchange: generalized reciprocity (a person who receives help pays it forward by helping a third person) and indirect reciprocity (a person who helps establishes a prosocial reputation and, as a consequence, later receives help from a third person). Although generalized exchange can be based on either process, generalized- and indirect-reciprocity are based on different mechanisms and, with few exceptions, have been investigated independently. We present an integrated approach that specifies when each process is most likely to promote prosocial behavior, and detail the implications for resource inequalities in generalized exchange systems. This approach also describes how generalized and indirect reciprocity jointly influence prosocial behavior. We report the results from four experiments designed to test the arguments.

**Time:** 9:30-9:45am

**Name:** Kevin Durrheim

**Paper Title:** Unpacking the contextual determinants of social exchange decisions. A simulation approach to fitting theory to data

**Co-authors:** James Theil, Kevin Igwe, Kim Titlestad, Mike Quayle

Agent Based Simulations are ideally suited for modelling emergent social phenomena but researchers are yet to develop methods for quantifying the fit between simulation and real-world data. We report a method for measuring the accuracy with which different theoretically-informed simulations replicate human interactions in a series of 40-round 14-player exchange games. This innovative methodology allowed us to determine which combination of social psychological motives – ingroup favoritism, propinquity, fairness, self-interest and reciprocity – affected exchange behavior in four different exchange contexts (crossed individual vs group and equal vs unequal). Overall the simulation made remarkably accurate predictions. The results showed that different combinations of motives affected behaviors in different exchange contexts. The study provides a method for contextually sensitive theory building in the social sciences using agent-based models.

**Time:** 9:45-10:00am

**Name:** Erik W. de Kwaadsteniet

**Paper Title:** The Emergence of Latent Norms in the Repeated Volunteer's Dilemma: The Role of Social Preferences and Asymmetry

**Co-authors:** Loes Bouman, Wojtek Przepiorka

We investigate how small groups tacitly coordinate in the repeated volunteer's dilemma (VOD) by developing latent norms. We focus on two norms: turn-taking, by which group members take turns in providing the public good, and single volunteering, by which the same group member provides the public good repeatedly while others free-ride. In two experiments, we test whether the norm that emerges is determined by group members' other-regarding preferences or by structural properties of the VOD. To test this, we measured subjects' other-regarding preferences and varied the asymmetry of the VOD (i.e., payoff asymmetry and focality). We find that the structural properties of the VOD have a larger bearing on the norm that emerges than other-regarding preferences. In the symmetric VOD, most groups develop a latent norm of turn-taking. By contrast, if there is one group member with lower costs, single volunteering by this member is coordinated on by most groups.



**Time:** 10:00-10:15am

**Name:** Nikoleta E. Glynatsi

**Paper Title:** Stability of defection, optimisation of strategies and testing for extortion in the Prisoner's Dilemma.

**Co-authors:** Vincent Knight

The iterated prisoner's dilemma is a well understood model, used to study the emergence of altruistic behaviour. In their 2012 paper entitled: "Iterated Prisoner's Dilemma contains strategies that dominate any evolutionary opponent" Press and Dyson introduced the notion of extortionate behaviour and raised questions about the importance of memory in the outcome of agent interactions. Their work has seen a breadth of responses including some doubts on the effectiveness of extortion. In this talk a number of theoretical insights are going to be presented that test the robustness of extortionate behaviour in multi agent interactions and highlight the importance of memory.

**Time:** 10:15-10:30am

**Name:** Eitan Adres

**Paper Title:** Social Dilemma of Ethnic Minority

**Co-authors:** -

The indigenous Arab minority comprises 21% of Israel population. The salience of social and economic integration of the Arab minority in Israel is a fundamental consensus. This paper examines how the minority members resolve the three level social dilemma: within group dilemma; the minority individual interests versus the general population interests; and the minority group interests versus the general population interests. Our findings supported the propositions that minority members tend to contribute less to a general population public good. Moreover, when the minority group interests are at stake, the phenomenon is reinforced. As for tax compliance, minority members who live in homogeneous villages or cities are more compliant than individuals who live in mixed cities. The credibility of authorities and the expectations from peers, significantly affect the compliance. Consequences are discussed.



Session 5  
Wednesday, June 5<sup>th</sup>, 2019  
11:00am~12:30pm

**Time:** 11:00-11:15am

**Name:** Sina A. Klein

**Paper Title:** Sustainability competition as a means to promote pro-environmental behavior independently from cooperation

**Co-authors:** Benjamin E. Hilbig

Recent research on the Greater Good Game – a game specifically designed to measure situations in which pro-environmental behavior (=PEB) and cooperation are mutually exclusive – shows that an increase in PEB typically comes with a decrease in cooperation whereas selfish behavior remains unaffected. Furthermore, a recent study suggests that a sustainability competition can increase PEB in pro-selves without harming PEB in pro-socials. Therefore, in a laboratory experiment (N=54), participants completed 20 trials of the Greater Good Game with instructions framing the game either as a sustainability competition (experimental) or a neutral decision task (control group). Results show that whereas the sustainability competition successfully increased PEB, this increase also led to a decrease in cooperation whereas rates of selfish behavior were unaffected. Altogether, this highlights both the uniqueness of situations in which PEB and cooperation are mutually exclusive and the need for further research on mechanisms promoting PEB in these situations.

**Time:** 11:15-11:30am

**Name:** Andreas Diekmann

**Paper Title:** Choosing Green Energy. A Social Dilemma with a Solution

**Co-authors:** Ulf Liebe, Jennifer Gewinner

We explored default effects of energy consumption using data from two electrical suppliers. In previous years several utilities switched the reference category for ordering electricity from grey energy to green energy. Both companies recorded the energy consumption before and after the intervention, i.e. the switch of the default category from grey to green energy. The novel aspects of our investigation are that we were able to analyze a large data set of more than 250'000 customers and that the sample included businesses as well as private households. Moreover, we observed the demand for green energy for several years before and after the intervention. These data made it possible to explore the persistency or fading out of default effects. Simple comparison of differences as well as more refined econometric analysis clearly showed that there is even a surprisingly large and persistent effect of a change in the reference category for businesses.

**Time:** 11:30-11:45am

**Name:** Eric Cardella

**Paper Title:** Green is Good – The Impact of Information Nudges on the Adoption of Voluntary Green Power Plans

**Co-authors:** Brad Ewing, Ryan Williams

A recent trend has been a move toward greater reliance on renewable or “green” energy sources. Using a choice experiment, we examine how information nudges regarding the efficiency, cost, and environmental impacts of different power-generating sources impact consumers’ preferences for adopting voluntary green-power plans. Based on 21,000 plan choices from two different samples totaling over 1,800 respondents, our results indicate that information nudges significantly impact respondents’ choice of plan; promoting the advantages of the green plan or the disadvantages of the gray plan increases green plan adoption, and to a similar extent. The magnitudes of these effects are sizable and equivalent to a change in the monthly premium of \$5/month. We document heterogeneous treatment effects based on income, education, environmental attitudes, and existing participation in a green plan. Our results have clear energy policy and green power marketing implications of a plausible, economical, and effective mechanism to increase adoption of green-power plans.

**Time:** 11:45am-12:00pm

**Name:** Gwendolyn A. Tedeschi

**Paper Title:** Impact of Political Beliefs on Intergenerational Environmental Dilemmas

**Co-authors:** Eric Scalone, Poonam Arora

Today’s environmental choices can result in positive or negative externalities (“benefits” and “burdens”) for future generations. This research examines how individual choices in intergenerational environmental dilemmas are influenced by conservative economic beliefs (EC), environmental attitudes (NEP) and concern for future generations (Next). In an experimental study (N=448), participants chose how much they would fish this season (leaving a future benefit) or how much they would spend to clean up (leaving a future burden). Independent of condition, EC, NEP and Next are all significantly correlated with each other suggesting underlying psychological connections among the three variables. Prediction of benefits by NEP is mediated by both Next and EC independently. For burdens, Next mediates the relationship between NEP and burdens and EC partially moderates the relationship between Next and burdens. Additional studies aim to understand the implications of these complex underlying relationships to develop interventions for enhancing cooperation in intergenerational environmental dilemmas.



**Time:** 12:00-12:15pm

**Name:** Yang Li

**Paper Title:** Common knowledge and collective goal setting: How do they influence cooperation in a climate change system?

**Co-authors:** Yoshihisa Kashima

Global warming has become one of the “hottest” problems requiring massive cooperation. In our study, we focus on the effect of collective goal setting and common knowledge on cooperation in a complex ecological environment. In a multi-player Climate Change game, participants need to balance their own economies’ development and CO2 omission in a complex ecologic system. We manipulate a) whether key knowledge is believed to be commonly shared, and b) whether a collective goal is set. Results show that a group goal helps people refraining over exploitation of the environment. Common knowledge in individual goal condition leads to more rapid CO2 concentration without creating greater economic growth, while common knowledge with group goal helps economic growth at a smaller environmental cost. However, group goal enlarges within group inequality, while lower inequality is found in common knowledge conditions.

**Time:** 12:15-12:30pm

**Name:** Ryan O. Murphy

**Paper Title:** Who cares about sustainable investing?

**Co-authors:** Ray Sin

Interest in sustainable (i.e., ESG - Environmental Social Governance) investing has accelerated in the last decade. In 2018, 12 trillion dollars were invested in ESG funds and interest continues to grow. Determining what investments are “sustainable” has been the central focus of research in this area to date, whereas scant attention has been paid to understanding who is motivated to invest sustainably. The current research fills that gap by developing a new methodology to reliably measure individuals’ preferences for ESG investing. Related to methods for measuring social value orientation, the approach calls upon an individual to make a series of revealed preference choices and from the pattern of their decisions, a continuous index of ESG preferences can be computed. We present results showing the psychometric validity of this new measure, as well as data from a nationally representative sample illustrating precisely who cares about ESG investing and to what degree.

Session 6  
Wednesday, June 5<sup>th</sup>, 2019  
2:30~4:00pm

**Time:** 2:30-2:45pm

**Name:** Ilan Fischer

**Paper Title:** Shaping each other's strategy in repeated PD games

**Co-authors:** Sebastian Goerg, Andreas Glöckner

To study reciprocal shaping of strategic behavior, we monitor the choices made under both natural and experimentally manipulated repeated prisoner's dilemma games. Results show that human participants: (i) are endowed with a cooperative predisposition towards opponents who exhibit similar strategies during early encounters, (ii) increase the extent of both cooperation and similarity of selected choices while continuously playing with the same opponent, and (iii) condition their level of cooperation on the game's similarity threshold - an index derived from the payoff matrix of the game. Moreover, examining a heterogeneous population of simulated agents provides novel insights into the capacity and limitations of reciprocal strategy shaping. The simulations show how the interaction with opponents of two intermediate similarity ranges has the power to shape payoff maximizing

**Time:** 2:45-3:00pm

**Name:** Eliran Halali

**Paper Title:** Trust your gut: Intuitive mind-set enhances the quality of trustworthiness forecasts

**Co-authors:** Stav Benjamin, Marius Usher

We compared affective/intuitive to analytical/deliberative mind-sets in forecasting the trustworthiness of interaction partners. We focused on two difficult tasks with an objective criterion of accuracy, which requires tapping on subtle affective cues that are expected to be indicative of the objective goals, to identify the trustworthiness of interaction partners. In three experiments, participants were instructed to rely on intuitive or deliberative mode of thought. In Experiment 1, participants evaluated potential flatmates, whose verbal descriptions were balanced in their attractiveness, but differed in the computer-manipulated trustworthiness of their facial pictures. In experiments 2 and 3, participants viewed short videos of trust-game receivers, who participated in a past experiment, and had to predict if they reciprocated or not. We found a clear superiority of the intuitive mind-set, suggesting that intuition promotes sensitivity to trustworthiness cues of potential interaction partners. By contrast, analytical mind-set resulted in predictions that were insensitive to trustworthiness information.

**Time:** 3:00-3:15pm

**Name:** Boris Maciejovsky

**Paper Title:** Too Much Trust in Group Decisions

**Co-authors:** David V. Budescu

Organizations often face a tension between collective objectives - the sharing of information - and individual incentives - increasing one's outcome, position, and status - which takes the form of a social dilemma. Traditionally, organizations have relied on committees and teams to tackle that challenge, but recently many organizations have explored the use of information markets. In this paper, we compared the ability of groups and markets to aggregate information in a hidden profiles task. We found that groups outperformed markets when there was no conflict of interest among participants, but with conflicts, markets outperformed groups. Participants had more trust in groups than in markets, even in cases with conflicts of interest. Finally, drawing on experienced forecasters from Good Judgment Open, we found that familiarity and experience with markets increased the endorsement, and use, of markets relative to traditional committees.

**Time:** 3:15-3:30pm

**Name:** Bohan Ye

**Paper Title:** On Trust and Disgust: Evidence from Face Reading and Virtual Reality

**Co-authors:** Tamar Kugler, Daphna Motro, Charles Noussair

We report the results of two studies that test the emotional underpinnings of trustor decisions. In study one, participants engage in a repeated trust game in the laboratory. The results show that trustors who are disgusted send less, and are also more disgusted the less that is returned to them. In study two, we directly manipulate participants' experienced disgust using video clips and virtual reality emotions inductions, and test the causal relation between disgust and trust. We report two studies exploring the relationship between disgust and trust. In Study 1 we induce incidental disgust using virtual reality. We observe that disgusted participants judge others as less trustworthy and send less in a trust game than neutral or sad participants. In Study 2 we measure integral emotions using face reading technology while participants play a repeated trust game, and also find a negative correlation between trust and disgust. Our data are consistent with the findings that disgust is associated with harsh moral judgments, and suggest that feelings of disgust are antithetical to the building of trust.

**Time:** 3:30-3:45pm

**Name:** Eric Scalone

**Paper Title:** A Cross-Cultural Understanding of the Role of Trust, Social Norms and Context in Predicting Cooperation in Environmental Dilemma

**Co-authors:** Marc Stefan Hoeller, Anna Ramon-Lopez, Poonam Arora

This research examines the influence of interactions between economic context, culture and specific trust on environmental dilemmas. In data collected across four cultures collectively representing the four combinations of high- or low-trust and loose or tight norms, participants were randomly assigned to one of three economic contexts (certain loss, certain gain, uncertain gain or loss). They then answered questions about generalized and specific trust prior to making a choice in an environmental dilemma which determined their earnings. Results showed specific trust, cultural norms and economic context were significant predictors of cooperation. Also, the three-way interaction between norms, specific trust and economic context was also a significant predictor. Although higher levels of specific trust elicit greater cooperation, the trust threshold is highest under certain loss and lowest under certain gain. Norm tightness also influences the trust threshold, where tight norms require greater specific trust for cooperation, making the interaction a three-way.

**Time:** 3:45-4:00pm

**Name:** Jered Abernathy

**Paper Title:** Bridging the Trust Gap between Partisans

**Co-authors:** -

Conflict between Democrats and Republicans is a central component of the contemporary American political system. Negative feelings and discrimination based on political orientation are rising, leading Americans to deeply distrust one another. Social identity theory provides a framework for not only understanding how this distrust between partisans persists, but how it may be negated. This study uses an online-experimental design, this study investigates the effects of two types of moral judgments on trust building: 1) moral universals (anti-cheating), and 2) moral judgments characterized by dissensus, where there is a large amount of disagreement across party lines (abortion rights). This study answers two research questions 1) Does moral consensus build trust between political outgroup members? and 2) Does moral disagreement decrease trust of ingroup members? Results from this study will be presented and future directions will be discussed for improving political discourse and generalizing interpersonal trust to a group-level.



## **Memorial Session: Celebrating the Life and Work of Toshio Yamagishi**

Wednesday, June 5, 2019 | 4:30-6:00pm

Organized by Paul van Lange and Nobuyuki Takahashi

### **Agenda:**

Introduction by Paul van Lange

Video

### **Speakers:**

Toko Kiyonari

Margaret Foddy

Daniel Balliet

Joanna Schug

Nobuyuki Takahashi





Poster Session 1  
Wednesday, June 5<sup>th</sup>, 2019  
8:00am~6:00pm

**Name:** Cindy Schipani

**Paper Title:** Mentoring in the #MeToo Era

**Co-authors:** Terry Morehead Dworkin

At present, there is a surge in attention focusing on sexual harassment. What is different about the current surge is that it is happening largely outside of the legal system, and in several cases, allegations alone have caused powerful people to lose their jobs and their reputations. The current surge was kicked off by focusing on a powerful individual, in this case a man in the entertainment industry, Harvey Weinstein, one of Hollywood's most prominent producers. Access by women to networks and mentors have proven to play a crucial role in climbing the corporate ladder. This paper examines the role of mentors and networks as critical pathways for women to succeed in positions of leadership, while navigating the revelations of hostile and harassing work environments brought out in this #MeToo era. This is essential for accessing opportunities for innovation a gender diverse leadership can provide.

**Name:** Eva M. Krockow

**Paper Title:** Balancing the risks of antibiotic use: A systematic review and synthesis of qualitative research on antibiotic prescribing behavior

**Co-authors:** Andrew M Colman, Edmund Chattoe-Brown, Carolyn Tarrant

Over-prescribing of antibiotics is a significant problem globally, contributing to the growth of antimicrobial resistance (AMR). Antibiotic overuse has previously been conceptualised as a social dilemma. We explored risk perceptions in antibiotic prescribing decisions in hospitals through a systematic review of qualitative research. Evidence indicates that AMR is generally perceived as a serious threat, but, due to the long-term nature of the risk, it is perceived as loosely coupled to individual actions. Physicians perceive antibiotics as highly effective, and their prescribing behaviour is shaped by avoidance of immediate and highly salient risks – risks of patient deterioration and death, and negative consequences for themselves as doctors. Prescribing antibiotics enables doctors to manage immediate risks with minimal cognitive demand. Framing the dilemma of antibiotic prescribing in terms of risk perceptions identifies multiple and conflicting risks that have to be managed when making prescribing choices, in particular, tensions between individual and collective outcomes.

**Name:** Misato Inaba

**Paper Title:** Minimum requirement of metarule that solves the dilemma of endogenous institution formation

**Co-authors:** Tetsuya Kawamura, Kazuhito Ogawa

Although introducing institutions that provide punishment or reward is known as an effective method to resolve the social dilemma, how institutions can be introduced is still not clear. Kosfeld, Riedl, and Okada (2009) addressed “the dilemma of endogenous institution formation.” When the metarule that “everyone, including those who disagree with introducing the institution, must obey the majority” is missing, institutional free-riders can exist. In our study, we investigated the minimum requirement of the metarule that can solve this dilemma. We examined two kinds of metarules—the unanimity rule and the majority rule—and found that the unanimity rule is key to solving this dilemma. The unanimity rule mandates that an institution will not be introduced if anyone disagrees with the existence of institutional free-riders. Assuming people have a tendency to avoid inequality, they may show intolerance for institutional free-riders without the explicit unanimity rule, which consequently may solve the dilemma.

**Name:** Andreas Diekmann

**Paper Title:** Heterogeneous groups overcome the diffusion of responsibility problem in a sanctioning dilemma

**Co-authors:** Wojtek Przepiorka

We employ the volunteer’s dilemma game to model diffusion of responsibility in social norm enforcement. The symmetric dilemma is a binary choice game in which all actors have the same costs of and benefits from cooperation and only one actor’s cooperation is required to provide the collective good for the group. The asymmetric dilemma differs from the symmetric game in one (strong) actor having lower costs of cooperation. Here we experimentally test the hypothesis that the diffusion of responsibility effect decreases as a consequence of the switch from the symmetric to the asymmetric dilemma. In particular, heterogeneous groups become more effective in enforcing social norms as they manage to tacitly coordinate on the strongest subject to sanction the norm breaker alone. Our findings support the proposition that even relatively small asymmetries in observable sanctioning costs facilitate bystanders’ tacit coordination on the “strongest” individual to negatively sanction norm breakers.

**Name:** Annika S. Nieper

**Paper Title:** Power and Cooperation: A Meta-Analytic Review of Economic Games and Distributive Negotiations

**Co-authors:** Daniel Balliet, Catherina Molho, Gerben van Kleef

Power is a fundamental dimension underlying social interactions that can offer profound insights for understanding how people cooperate. Yet thus far, past research offers conflicting evidence on the relation between power and cooperation. We meta-analyze experimental studies of power and cooperation using economic games and negotiation paradigms. Across 85 studies and 104 effect sizes, we find that power has an overall detrimental impact on cooperation ( $d = -0.313$ ,  $N = 14,998$ ). Certain experimental manipulations of power show a significant negative impact on cooperation (veto power, endowment heterogeneity, different punishment ratios, and role assignments), whereas others have no significant effect on cooperation (asymmetric alternatives and recalling a powerful time). We further investigate several moderators (type of power manipulation, payment, percentage of male participants, one-shot vs. iterated), which had no impact on the relation between power and cooperation. These results increase the understanding of how power influences social interactions.

**Name:** Young-eun Lee

**Paper Title:** The influence of sharing experiences on third-party punishment in children

**Co-authors:** Felix Warneken

While costly third-party punishment is a well-established phenomenon in adults (Fehr & Fischbacher, 2004), few studies have investigated its ontogenetic origins in children. The few existing child studies are limited because participants interact with puppets or imagined players. To date, no research tested children's punishment in live interactions with peers. We present a series of experiments with a novel computer game to examine children's punishment in live interactions. In Study 1, we validated the new computer game method by finding that third-party punishment emerges from 5 to 6 years of age. In Study 2, we examined whether the experience as a victim of unfair treatment influences subsequent punishment behaviors. Preliminary analyses indicate that children who were treated unfairly tended to enact third-party punishment more often than those who were treated fairly. We discuss the emergence of costly third-party punishment in childhood with a novel experimental tool.

**Name:** Eizo Akiyama

**Paper Title:** The effect of "dilemma" of the prisoner's dilemma game on the mental conflict, and conflict averting behavior.

**Co-authors:** Makoto Mizuno

When facing the Prisoner's Dilemma (PD) Game, we feel conflict or "dilemma" between maximizing personal profit and increasing social profit. In this study, we conducted an experiment where subjects play various types of PDs whose payoff matrices are different in personal or social profits. Based on the investigation of the difficulty they perceived in subjects' decision and on the analysis of the time for each subjects' decision, we found that subjects actually feel largest conflict and to take much time for decision when they play PDs where personal profits and social profits are competing. We also investigated if such conflict can be reduced by "the third choice," in our case, the choice to exit the game. Our results show that "dilemma" structure in games can have similar effects as found in the Tversky and Shafir (1992) that have shown that the increase in the conflict between options in a choice set can lead to choice deferral.

**Name:** Lu Gram

**Paper Title:** An agent-based model of community mobilisation to prevent domestic violence in the slums of Mumbai

**Co-authors:** David Osrin, Nayreen Daruwalla

Community mobilisation has been successfully used to reduce violence against women in low- and middle-income countries, but their mechanism of operation has been poorly theorised. We present an agent-based model of collective action to prevent domestic violence in the context of on-going large-scale cluster randomised trial in Mumbai, India. We model collective action as a repeated game in which male and female agents representing husbands and wives alternate between choosing levels of effort in preventing violence against women (wives), effort in enforcing masculinity norms (husbands) and level of domestic violence (husbands). Social dilemmas arise when the marginal benefit of efforts to prevent violence for a single woman is small relative to the cost of doing so, but the per capita benefit of prevention effort increases, the more individuals participate. We show analytical and simulation results demonstrating the existence of social dilemmas and discuss empirical applications to our trial in Mumbai.

**Name:** Senran Lin

**Paper Title:** Why Do Firms Train? A Behavioral Explanation

**Co-authors:** -

In this paper, I rationale the motivations of the profit-maximizing employers to provide general-skill training by using a behavioral economic approach. General skills are those skills that can be used as effectively in other firms. Due to the transferability of general skills, giving training of such skills not only increases the employees' productivities in the current firm but also boosts the average productivity level of the industry.

**Name:** Sherry Schneider

**Paper Title:** Promoting Delay of Antibiotic Treatment by Influencing Collective Identity: Three Studies

**Co-authors:** Rachel Sonnier

Antibiotics will be ineffective in the future unless individuals dramatically curtail their use. In three studies, participants in two conditions emphasizing collective good (shared interdependence or impact on future generations) were expected to be more willing to delay antibiotic treatment than those in a neutral condition. In Study 1, 177 students read on-line text on identity theft, or a collective prime embedded in text on global warming, followed by a scenario in which a doctor prescribed antibiotics but recommended postponing treatment (Rönnerstrand & Andersson Sundell, 2015). Willingness to delay did not differ between conditions. Study 2 (N = 192) had similar results when videos were used to enhance priming. Study 3 measured impact of collective appeals to delay treatment on adults recruited from mTurk (N = 557). An information-only condition was added. Attitudes towards antibiotics were affected by collective appeals, but days delayed was not. Implications will be discussed.



Session 7  
Thursday, June 6<sup>th</sup>, 2019  
8:30~10:30am

**Time:** 8:30-8:45am

**Name:** Klarizze Puzon

**Paper Title:** Regional identity and intergenerational resource conflict

**Co-authors:** Ruth Tacneng, Thierno Barry, Marc Willinger

We examine the impact of ethnic heterogeneity 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 common-pool resource suddenly drops to lower values. We present a two-player, framed field experiment on a sample of Fulani (majority group) and Malinke (minority group) participants in Guinea, Africa. Our main treatment variable is the ethnically-inclined region of origin of the two players. Preliminary analysis suggest that ethnic heterogeneity significantly affects the behavior of the Fulani. Across time, the Fulani 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 ethnic identity as theirs.

**Time:** 8:45-9:00am

**Name:** Robert Böhm

**Paper Title:** How Defaults Shape War and Peace

**Co-authors:** Nir Halevy, Tamar Kugler

A remarkable feature of violent intergroup conflict throughout human history concerns its apparent tendency to perpetuate itself. To understand what makes intergroup conflict such a sticky problem, we build on interdisciplinary insights concerning the power of defaults to shape human behavior. We propose that intergroup aggression is more likely when it is presented as the default than when either peaceful coexistence or selfishness are presented as defaults. We conducted three experiments (overall  $N = 1,507$ ) to test our hypotheses. Experiments 1 and 2 used incentivized economic games between teams of decision makers, and demonstrated that individuals' propensity to invest their resources in any behavioral alternative increases substantially when that behavioral alternative is presented as the default. These findings generalized across different social identities and across different levels of identification with the group (preregistered Experiment 2). Finally, these findings also generalized to policy recommendations for governmental spending (preregistered Experiment 3).

**Time:** 9:00-9:15am

**Name:** Hillie Aaldering

**Paper Title:** Parochial vs. universal cooperation: Introducing a novel economic game of within- and between-group interaction

**Co-authors:** Robert Böhm

Engaging in personally costly within-group cooperation benefits one's in-group members but also impacts other groups by benefitting, neglecting, or harming out-group members, leading to a range of potential consequences for between-group relations (e.g., collaboration vs. competition). We introduce the Intergroup Parochial and Universal Cooperation (IPUC) game to investigate the prevalence of the individual preferences underlying these different expressions of within-group cooperation: universalism, weak parochialism, and strong parochialism. In two online experiments with natural groups, we show that the IPUC has value beyond existing economic games in measuring these preferences separately. In a third experiment conducted in the lab, we show how dispositional measures traditionally associated with within- and between-group cooperation, i.e., Social Value Orientation, Social Dominance Orientation, Honesty-Humility, and Empathic Concern, predict different preferences. Thus, the IPUC provides a tool to better understand within- and between group interactions and to test interventions to overcome intergroup conflict.

**Time:** 9:15-9:30am

**Name:** Eyal Ert

**Paper Title:** The Effect of Issue Linkage on Cooperation in Bilateral Conflicts: An Experimental Analysis

**Co-authors:** Shier Cohen-Amin, Ariel Dinar

Environmental bilateral conflicts, e.g., international environmental agreements, often involve more than one conflictive issue that requires solution. The theoretical economic literature suggests that issue linkage facilitates cooperation. Yet experimental economics has focused almost exclusively on single issues/games. The current experiments study bilateral conflicts over two issues, each is modeled as a different prisoner dilemma game. The effect of issue linkage on cooperation is evaluated by comparing a treatment in which the two games are played sequentially (isolated) with one in which they are played simultaneously (linked). Specifically, in the linked treatment each agent observes the payoffs from playing the different paths across the two games (e.g., cooperate in game 1 but defect in game 2) and then act accordingly by committing to one of these paths. The results show that issue linkage increase the level of mutual cooperation and decrease the level of mutual defection in the prisoner dilemma games.

**Time:** 9:30-9:45am

**Name:** Alexander Stewart

**Paper Title:** Explaining Parochialism: A Causal Account for Political Polarization in Changing Economic Environments

**Co-authors:** Nolan McCarty, Joanna J. Bryson

Political and social polarization are a significant cause of conflict and poor governance in many societies, thus understanding their causes is of considerable importance. Here we demonstrate that shifts in socialization strategy similar to political polarization and/or identity politics could be a constructive response to periods of apparent economic decline. We start from the observation that economies, like ecologies are seldom at equilibrium. Rather, they often suffer both negative and positive shocks. We show that even where in an expanding economy, interacting with diverse out-groups can afford benefits through innovation and exploration, if that economy contracts, a strategy of seeking homogeneous groups can be important to maintaining individual solvency. This is true even where the expected value of out group interaction exceeds that of in group interactions. Our account unifies what were previously seen as conflicting explanations: identity threat versus economic anxiety.

**Time:** 9:45-10:00am

**Name:** Ori Weisel

**Paper Title:** The complementarity of centralized and decentralized institutions in fostering cooperation

**Co-authors:** Till Olaf Weber, Simon Gächter

Cooperation could be the result of (1) an intrinsic motivation to cooperate; (2) informal punishment (e.g., peer-pressure); or (3) formal sanctioning institutions (i.e., police and courts). We report on laboratory experiments, conducted in the UK and in Turkey, with four variations of a repeated public goods game: without punishment, with informal peer-punishment, with a formal sanctioning institution, and with a combination of both. In the UK Informal peer-punishment induced high and stable cooperation levels, with decreasing levels of punishment. The formal sanctioning institution was less effective than both informal punishment alone and the combination of both types of punishment. The picture is very different in Turkey, with less cooperation, more formal and informal sanctioning, and, consequently, reduced social welfare. We demonstrate that formal sanctioning institutions cannot foster cooperation in the long run without the support of informal peer-punishment, which, in turn, requires that sufficient cooperation norms are in place.

**Time:** 10:00-10:15am

**Name:** Thomas Sabitzer

**Paper Title:** The social dilemma of sharing and the role of regulation

**Co-authors:** Eva Hofmann, Barbara Hartl, Sarah Marth, Elfriede Penz, Erik Hölzl

The sharing economy must often deal with free-riders and can be explained in terms of a social dilemma. Regulation may prevent people from exploiting, but regulation in the sharing economy is scarce. Nevertheless, consumers desire protection from exploitation. The slippery slope framework is used to investigate how regulation in form of coercive (controls & punishment) and legitimate power (information, expertise, position, role model) influences the contribution to and usage of a shared good. In a laboratory experiment, 362 consumers participated in a give-or-take-some game and had to imagine that they share a good with three other consumers. Results indicate the importance of legitimate power: the higher legitimate power, the higher the contributions. Usage was not influenced by power. Therefore, providers of shared goods should try to inform their consumers and support them in dealing with the shared goods to ensure correct behavior and show their customers that regulation is present.

**Time:** 10:15-10:30am

**Name:** Davide Barrera

**Paper Title:** Order with some law: Institutions moderate the effects of reputation in a cryptomarket for illegal drugs.

**Co-authors:** Filippo Andrei, Emilio Sulis

The ability to share information and generate reputation effects is considered the main mechanism explaining the emergence of large-scale cooperation among humans, especially in the absence of a Leviathan. For example, reputation mechanisms have been found to support cooperation in online cryptomarkets where illegal goods are exchanged among anonymous actors (Przepiorka et al. 2017). However, even in such extreme settings alternative institutions can emerge. Using a large dataset, including 30459 purchases of illicit drugs we investigate how the effects of reputation mechanisms on price and number of sales are moderated by the payment options offered by the cryptomarket platform. Our results show that if sellers choose to let the platform act as a mediator in the transactions, the price and number of sales obtained are less affected by the seller's reputation and more affected by the buyer's trust in the platform ability to act as a leviathan.



Session 8  
Thursday, June 6<sup>th</sup>, 2019  
11:00am~12:30pm



**Time:** 11:00-11:15am

**Name:** Hannes Rusch

**Paper Title:** Shared Intentions: The Evolution of Collaboration in Symmetric 2x2-Games with Imperfect Recognition of Types

**Co-authors:** -

A recent series of papers has introduced a fresh perspective on the problem of the evolution of human cooperation by suggesting an amendment to the concept of cooperation itself: instead of thinking of cooperation as playing a particular strategy in a given game, usually C in the prisoner's dilemma, we could also think of cooperation as collaboration, i.e. as coalitional strategy choice, such as jointly switching from (D,D) to (C,C). The present paper complements previous work on collaboration by expanding on its genericity while relaxing the assumption that collaborators are able to perfectly identify their own kind. Conditions for the evolutionary viability of such collaboration under fairly undemanding assumptions about population and interaction structure are derived. Doing so, this paper shows that collaboration as a maxim, i.e. a principle of strategy choice, is adaptive in a broad range of niches, i.e., stochastic mixtures of games.

**Time:** 11:15-11:30am

**Name:** Darryl A. Seale

**Paper Title:** Impacts of Correlated Preferences in Two-sided Matching: Computer Simulations of the Stable Marriage Problem

**Co-authors:** Amnon Rapoport

An important problem in two-sided matching markets is solving the problem of matching agents on one side of the market to agents on the other side. A common example of two-sided markets is matching men and women searching for a mate. In their seminal paper, Gale and Shapley (1962) showed that, under certain assumptions, two-sided matchings have at least one stable outcome (assignment), and offered an algorithm for identifying a stable matching. In the present research we examine the impacts of correlated preferences on the (1) number of stable matches, and (2) mean preference (satisfaction) scores, through a series of computer simulations. Results show that when agents on both sides hold correlated preferences, the number of stable matches and satisfaction scores decline significantly. Further, when one side of the agents hold correlated preferences and the other side does not, satisfaction scores are significantly lower for the side with correlated preferences.

**Time:** 11:30-11:45am

**Name:** Senran Lin

**Paper Title:** Regret Games

**Co-authors:** Martin Dufwenberg

We theorize how anticipated regret affects players' behaviors in games. The regret is captured by the gap between the payoff a player actually gets and his counterfactual expected payoff from the best strategy among foregone actions. Ex-post beliefs determine the degree of a player's regret, the former is affected by a player's information across end nodes. We apply our framework to a threshold public goods game. We compare two feedback settings—one is such that players will only learn whether they get the reward at the end; the other is that players will also learn the total contribution when the game ends. We provide an example showing that if a player is motivated by anticipated regrets, she can behave differently under these two settings. Generally, we show that the set of pure strategy equilibrium won't be affected by changing feedbacks. However, the set of mixed strategy equilibrium can be different.

**Time:** 11:45am-12:00pm

**Name:** Bryan Bruns

**Paper Title:** Inequality Increases in the N-Person Topology of Games

**Co-authors:** Seth Frey, Austin Shapiro

Economic games offer a very simple and flexible representation of human interaction scenarios. Nevertheless, researchers tend to focus on a very small subset of the possible games, with little regard for the richness of the representation to characterize the diversity in our daily interactions. We explore the payoff space of n-person games, which offers insights into the kind of social problems that may occur, as well as the extent of inequality in opportunities and results. Treated as a typology of human interactions, our findings imply that large human social systems are most likely to have zero or 1 Nash Equilibria; are very unlikely to be win-win or symmetric; and are extremely unlikely to have equal payoffs at equilibrium. Compared to the topology of 2x2 games, the topology of n-person games has increased inequality, and the prevalence of inequality increases rapidly as the number of participants increases.

**Time:** 12:00-12:15pm

**Name:** Athena Aktipis

**Paper Title:** Smartphone use as a Stag Hunt Game: Do smartphones create a coordination problem for face-to-face interaction?

**Co-authors:** Roger Whitaker, Liam Turner

Smartphone use changes the landscape of social interactions in dramatic ways, including introducing new social dilemmas to daily life. The challenge of putting down one's smartphone to have a conversation is an example of a classic coordination problem from game theory: the Stag Hunt game. The Stag Hunt is a parallel with the challenges of putting down a smartphone to have a face-to-face interaction: you and your interaction partner might both prefer the higher payoff option of having a face-to-face interaction, but neither of you wants to put down your phone and risk not having anything to do while your partner checks their email or scrolls their social media feed. Here we discuss insights that come from applying game theory to this 'social media use dilemma' and offer potential solutions that come out of a game theoretic analysis.

**Time:** 12:15-12:30pm

**Name:** Jurgis Karpus

**Paper Title:** The future of human-AI coordination

**Co-authors:** Adrian Krueger, Bahador Bahrami, Ophelia Deroy

Humans will soon have to switch from being mere users of machines to being their co-players in strategic social settings with artificial agents increasingly endowed with their own autonomous decision-making capacities. The impact of this on people's choice behaviour and, in turn, on the desirability of outcomes of human-AI interactions is yet unknown. Game-theoretic analysis of human social interaction has shown that people are often able to tacitly cooperate and coordinate their actions for the attainment of mutually beneficial results. This study investigates whether such cooperative and coordinated choice behaviour will be as likely to emerge in people's interactions with AI systems as it does among humans. We report results from an experiment focused on four well known scenarios: the Prisoner's Dilemma, the Stag Hunt, the Chicken, and the Trust games.



## **Crescent Moon Ranch Social Afternoon**

333 Red Rock Crossing Rd. Sedona, AZ 86336

**Thursday, June 6, 2019**

**1:00-5:00pm**

Transportation will be provided. Please arrive in the lobby at 12:45pm.

**Lunch will be served.**

Be sure to bring comfortable shoes and clothes suitable for water.  
Recommended: Bathing suit, towel, water shoes, hat, sunscreen, etc.

We ask that you practice *Leave No Trace* principles while attending.  
(Plan ahead and prepare, travel and camp on durable surfaces, dispose of waste properly, leave what you find, minimize campfire impacts, respect wildlife, and be considerate of other visitors.)



Session 9  
Friday, June 7<sup>th</sup>, 2019  
8:45~10:30am

**Time:** 8:45-9:00am

**Name:** Isabel Thielmann

**Paper Title:** Personality and Prosocial Behavior: A Meta-Analysis

**Co-authors:** Giuliana Spadaro, Daniel Balliet

Individual differences in prosocial behavior have been consistently documented across a variety of interdependent situations modelled in economic games. To account for these inter-individual differences, research has increasingly considered different personality traits. We conducted the first all-encompassing meta-analysis on the link between 51 traits and prosocial behavior in the six most commonly applied games, including evidence from 769 studies and 3,519 unique effect sizes. Integrating the logic of situational affordances with (motivational) concepts from Interdependence Theory, we developed a theoretical framework allowing for clear predictions about which traits should show the strongest links to prosocial behavior in which games, and why. In line with these predictions, the strongest correlations emerged for those traits being (theoretically) linked to any of the key affordances involved in the games. Overall, the findings corroborate the importance of situational affordances for the expression of (prosocial) behavior and for enhancing our understanding of individual differences therein.

**Time:** 9:00-9:15am

**Name:** Joshua Tybur

**Paper Title:** Willingness to share infectious physical contact tracks other-regarding social preferences

**Co-authors:** Tom Kupfer

Other-regarding preferences are often measured via resource allocation tasks. Here we propose and test the hypothesis that willingness to share potentially infectious contact partially reflects these other-regarding preferences. In each of two studies ( $N$ 's = 463 and 390), participants imagined a person they know and completed (1) a 60-item resource-allocation task (e.g., would you rather receive \$17 and the target receive \$0 or the target receive \$37 and you receive \$0) with this person in mind and (2) a 10-item measure of comfort with sharing potentially infectious contact (e.g., Drinking from the same water bottle) with that person. In both studies, other-regarding preferences were strongly related to comfort with infectious contact with the target ( $r$ 's = .68 and .62). Further, in both studies, this relationship was robust to other's identity (e.g., close friend versus acquaintance), other's physical attractiveness, other's hygiene, and the duration of the relationship between self and other.

**Time:** 9:15-9:30am

**Name:** Simon Columbus

**Paper Title:** Interdependence and Cooperation in Daily Life

**Co-authors:** Catherine Molho, Francesca Righetti, Daniel Balliet

Philosophers and scientists have long debated the nature of human social interactions and the prevalence of mutual dependence, conflict, and power asymmetry. Yet, there is surprisingly little empirical work documenting the patterns of interdependence people experience in daily life. We use intensive experience sampling to study how people think about the fundamental dimensions of interdependence in daily life and how these perceptions relate to cooperation. Findings from samples of individuals ( $n = 284$ ;  $k = 7,248$  situations) and romantic couples ( $n = 278$ ;  $k = 6,766$ ) showed that most social interactions, across various interaction partners, were perceived as containing moderate mutual dependence, equal power, and corresponding interests. We found that in daily life and lab experiments, higher mutual dependence and lower conflict were associated with more cooperation; power was unrelated to cooperation. Our findings stress the importance of studying a diversity of interdependent situations to better understand cooperation in daily life.

**Time:** 9:30-9:45am

**Name:** Daniel Balliet

**Paper Title:** The Cooperation Databank (CoDa)

**Co-authors:** Giuliana Spadaro, Simon Columbus, Ilaria Tiddi, Caroline Graf, Adam Stivers, Alisha Hudson, Angelo Romano, Annika Nieper, Bela Rinderu, Catherine Molho, Isabel Thielmann, Jan Luca Pletzer, Junhui Wu, Kateland Pador, Mingliang Yuan, Olmo van den Akker, Pascale Tamis, Roberta Ciulla, Sakura Arai, Shuxian Jin, Stijn Peperkoorn, Yukako Inoue

Publishing studies using standardized, machine-readable formats (e.g., nanopublications) will allow enable search engines to perform instant, on demand meta-analyses. To build a semantic-based technology that embodies these functions, we have developed the Cooperation Databank (CoDa) – a databank that will contain the entire history of research on human cooperation. For each study, we have hand-coded the quantitative results and 48 study characteristics. We have produced an ontology that defines and relates concepts in cooperation research and allows us to represent the relationships between individual results. We have developed a prototype of a website with a search engine that, based on the ontology, will enable users to retrieve all studies known to measure or manipulate a specific variable, and then perform meta-analyses. I will share an example of the information CoDa will enable researchers to acquire, and discuss the benefits of CoDa for increasing knowledge of human cooperation and improving scientific practices.



**Time:** 9:45-10:00am

**Name:** Martin Kocher

**Paper Title:** Cooperation in a company: A large-scale experiment

**Co-authors:** Marvin Deversi, Christiane Schwierien

We analyze behavior in social dilemmas within a company setting in order to study external validity and consequences of a cooperative attitude. Around 1000 employees of a large software firm participate in a fully incentivized online experiment. We observe very high levels of cooperation in a modified public goods game and the typical conditional cooperation patterns. When linking cooperation levels with individual decisions and outcomes within the company, cooperation in our experiment is predictive, for instance, for the receipt of appreciation awards. However, performance ratings and other performance measures are higher for more cooperative employees only in the sales division of the company. For the remaining employees the relationship is significantly negative. More cooperative individuals also report a higher level of perceived stress. We analyze mechanisms that explain these results.

**Time:** 10:00-10:15am

**Name:** Joanna J. Bryson

**Paper Title:** Game Technology as an Intervention for Public Understanding of Social Investment

**Co-authors:** Bryn Brandt-Law, Andreas Theodorou

Cooperative behaviour is a fundamental strategy for survival and social behaviour. Cooperation promotes prosocial behaviour, positively affects economies and social relationships, and makes larger societal structures possible. People vary, however, in their willingness to engage in cooperative behaviour. Previous research has shown that explicit knowledge of the benefits of cooperation in the form of public goods investments does not universally promote that investment, even when doing so is beneficial to the individual and group. The present study examines whether a computer game intervention, The Sustainability Game, can increase cooperative behaviour by altering individuals' implicit understanding of cooperative dynamics. The Sustainability Game is a serious game that provides an overview of a multi-agent system based on scientific simulations of real economic and ecological dynamics. Our results demonstrate that the Sustainability Game intervention significantly increased individuals' cooperative behaviour in partially anonymised public goods contexts, but not when one's cooperative partner was identifiable.

**Time:** 10:15-10:30am

**Name:** Yasuyuki Kudo

**Paper Title:** Methodology for Modeling the Probability of Cooperative Action in Various Social Dilemmas

**Author/Co-authors:** Takeshi Kato, Jun Otsuka, Hayato Saigo, Kaori Karasawa, Hiroyuki Yamaguchi, Yasuo Deguchi

Factors that promote cooperative action differ depending on the characteristics of the social dilemma in which cooperation is required. Thus, we need specialized knowledge of these characteristics to resolve social dilemmas. To reduce the time and effort required to attain such knowledge, we propose a new modeling methodology for predicting the probability of cooperative action by inputting the state of the social dilemma. Our model has inputs with 33 feature vectors inspired by the decision-making process of cooperative action (Hirose, 1994), and was trained with the experimental psychology data from 700 studies that simulated social dilemmas. The model includes a neural network in its structure and showed improved accuracy and robustness compared with existing logistic regression models. We developed analysis software that implements the proposed model. The application marks the first step toward general-purpose automatic analysis of social dilemma.



Session 10  
Friday, June 7<sup>th</sup>, 2019  
11:00am~12:30pm

**Time:** 11:00-11:15am

**Name:** Adam W. Stivers

**Paper Title:** The Control Orientations Inventory: Concurrent Validation in the US, Poland, and Japan

**Co-authors:** D. Michael Kuhlman, Janusz Grzelak, Mikolaj Winiewski, Irena Zinserling, Agnieszka Mulak, Hirofumi Hashimoto, Toshio Yamagishi

Social dilemma research has paid much attention to decision making in socially interdependent situations. Considerably less attention has been focused on preferences people have for the types of situations they want to be involved in. This question relates to the ecological validity of social dilemma research, as natural interactions often afford a choice between situations with different interdependence structures. The present paper is based on work begun at the University of Warsaw by Janusz Grzelak and his students (1982), which was theoretically grounded in work by Kelley and Thibaut (1978) quantifying five types of outcome control in matrix games: Autonomy, Respect, Dominance, Passivity, and Collaboration. Since 1982 collaborators from Warsaw, Delaware and Japan built on Grzelak's work, which led to the Control Orientations Inventory (COI) as a measure of preferences for these five types of control. We have established the validity of the COI measure concurrently in these three countries.

**Time:** 11:15-11:30am

**Name:** Angelo Romano

**Paper Title:** Parochial Cooperation and Reciprocity Across 42 Societies

**Co-authors:** Daniel Balliet, James Liu, Toshio Yamagishi, Matthias Sutter

Decades of research in social sciences have shown that humans discriminate in favor of their group members compared to outgroup members and strangers, a phenomenon known as parochial altruism. Several theories have been proposed to explain the variation underlying parochial cooperation. In this study, we provide a large scale cross-societal study that addresses many fundamental issues about parochial altruism in cooperation. To do so, we collected data in an online experiment where we manipulated the nationality of the interacting partner, and the observability of the choice. We recruited 18,000 participants from 42 societies around the globe that differ among relevant cross-societal dimensions. Our findings illuminate our understanding of cross-societal factors (e.g., quality of institutions, religiosity, relational mobility) related to discrimination, provide a test for prominent theories that explain why we discriminate between ingroup and outgroup members, and inform on relevant individual differences associated to parochial altruism in cooperation.

**Time:** 11:30-11:45am

**Name:** Giuliana Spadaro

**Paper Title:** Cross-societal variation in cooperation: A meta-analytic approach

**Co-authors:** Daniel Balliet, Caroline Graf, Mingliang Yuan, Shuxian Jin, Sakura Arai, Bela Rinderu

Cooperation with strangers varies across societies. Here we test hypotheses that high quality societal institutions, high religiosity, and high social mobility predict higher amounts of cooperation among strangers. We meta-analyze cooperation rates in all studies using a prisoner's dilemma game published between 1958-2017, including around 750 studies from 35 countries. For each study, we coded overall cooperation, several study characteristics (e.g., cooperation index and group size), and country-level indicators retrieved from established databases (e.g., World Bank and WVS). We use mixed-effect meta-regression to test hypotheses about country level indicators that predict cooperation. We will compare the predictive power of several country level indicators, after controlling for several study characteristics. We also take an exploratory approach by using machine learning methods to discover which country-level indicators relate to variation in cooperation. This project will identify which cross-societal differences can account for variation in cooperation among strangers.

**Time:** 11:45am-12:00pm

**Name:** Paul van Lange

**Paper Title:** Are Tendencies to Inequality Aversion Universal?

**Co-authors:** Yi Ding Junhui Wu, Tingting Ji, Xu Chena

How do people varying in wealth respond to unfairness? Might the patterns of response differ across individualistic cultures (e.g., United States) and vertical-collectivist cultures (e.g., China)? Decades of research predominantly conducted in Western societies reveals that people, especially the less wealthy, are averse to high levels of inequality, and thus tend to reduce inequality. Consistent with inequality aversion, in four cross-national studies, we find that in the United States people who perceive themselves as less wealthy reject unfair offers more often. In China we consistently find the opposite effect: people with higher (versus lower) perceived wealth reject unfair offers more often. The opposing effects of perceived wealth on rejection decisions were mediated by feelings of deservingness. We conclude that the equality restoration observed in Western societies does not necessarily generalize to non-Western societies, especially those societies where vertical differences in income and wealth are more strongly respected, valued, and protected.

**Time:** 12:00-12:15pm

**Name:** Niels J. Van Doesum

**Paper Title:** Social mindfulness across the globe

**Co-authors:** Ryan O. Murphy, Paul A. M. Van Lange, et al.

Humans are often seen as social animals, but not everyone will always be equally mindful of others. Individual differences have indeed been found, but would social mindfulness also be shaped by one's location in the world? Expecting cultural differences to exist, we examine if and how social mindfulness differs across countries. At little to no material cost, social mindfulness typically entails small acts of attention or kindness. Even though fairly common, such low-cost cooperation has received hardly any empirical attention, resulting in a surprising lacuna in our understanding of cooperation. Measuring social mindfulness across 31 samples from industrialized countries ( $N = 8,354$ ), we find cross-national variation. Among selected country-level variables, social mindfulness is most strongly associated with an index for environmental performance. This contributes to the literature on prosociality by targeting the kind of everyday cooperation that is more focused on communicating benevolence than on providing material benefits.

**Time:** 12:15-12:30pm

**Name:** Jennifer S. Anderson

**Paper Title:** We The People: The Social Dilemma that is American Society

**Co-authors:** -

In this paper, I argue that contemporary United States culture represents a social dilemma. The notion of a US society focused on collective well-being evokes any number of philosophical, political, and ideological retorts, and the current state of this social dilemma appears tipped in favor of self-interest. This is untenable given increasingly limited environmental and fiscal resources. The tension between relational and individual concerns is perhaps most striking in our business institutions. I examine the philosophical basis for the fundamental role of cooperation in our success, and subsequent historical and societal trends that have shifted public sentiment away from cooperation and toward competition. I suggest that work organizations have the most potential as a context for change, and that incorporating the foundations of stakeholder trust theory, positive organizational psychology and relational models of organizational justice can help to modify our beliefs about the importance of collective well-being.

Session 11  
Friday, June 7<sup>th</sup>, 2019  
2:30~4:00pm



**Time:** 2:30-2:45pm

**Name:** Michael Quayle

**Paper Title:** Group genesis in a novel two-mode model of opinion-based groups

**Co-authors:** -

Groups are the psychological basis by which collective interests become individually meaningful and therefore an important basis for cooperation. But where do groups come from and what are the minimal mechanisms required for their genesis and perpetuation? Here I propose a novel model of opinion-based group formation in a two-mode network structure where people are grouped by shared attitudes; and attitudes are semantically connected when held by the same people. An agent-based model explores whether a simple 2-mode affiliation mechanism (where people are more likely to agree with attitudes if they already agree on other things) can result in group genesis and the polarisation of “people” and “attitudes.” Results show that this structure can result in polarized opinion-based groups. I discuss how this way of thinking about attitudes as a basis for group identity may be useful for understanding opinion dynamics in social media.

**Time:** 2:45-3:00pm

**Name:** Ben Grodeck

**Paper Title:** Cooperating with future generations: An experimental investigation of altruism in identity-affecting decisions

**Co-authors:** Toby Handfield, Justin Bruner, Matthew Kopec

Future oriented policies not only determine the welfare of future generations, but also who will exist in the future. In this paper, we investigate the altruistic behaviour of subjects under conditions which model a choice of this sort. Using a dictator game in a laboratory study, we have subjects make decisions that affect both the endowment and the identity of future recipients. We find that the majority of subjects (74%) in the control group make a generous decision, compared to only 38% of subjects in the identity affecting treatment. We further investigate whether this is due to subjects employing different moral principles in identity-affecting contexts, or if they instead are exploiting this context which minimizes the social image costs of non-normative behavior. We find that the lack of generosity is largely explained by the choices of excuse-driven types, rather than due to moral attitudes.

**Time:** 3:00-3:15pm

**Name:** M. Jimena Gonzalez-Ramirez

**Title:** Understanding Cooperation in a Populist Landscape

**Co-authors:** Hillie Aaldering, Poonam Arora

We examine the impact of populism – increasing identification with an ethnic majority and declining support of government policies – on universal and parochial cooperation. 192 participants, from the ethnic majority in the UK, were assigned to a pro- or anti-Brexit group based on actual preference, and allocated ten tokens across four options in an intergroup cooperation game (Aaldering et al., 2018): to benefit both pro-and anti-Brexit groups (universal cooperation), to benefit their group but not harm the outgroup (weak parochial), to benefit their group and harm the outgroup (strong parochial), to benefit only themselves (selfish). We find cosmopolitanism and government support (positively) and ethnic majority identification (negatively) to predict universal cooperation, while cosmopolitanism (negatively) and ethnic majority identification (positively) predict strong parochial cooperation. Thus, more nationalistic people are not only unwilling to join forces with out-groups, but are even willing to harm them.

**Time:** 3:15-3:30pm

**Name:** Toko Kiyonari

**Paper Title:** Salivary testosterone promotes dominance in the Ultimatum Game only when players' social rank is high.

**Co-authors:** Yukako Inoue, Robert P. Burriss, Taiki Takahashi, Toshikazu Hasegawa, Toshio Yamagishi

Endogenous testosterone (T) is generally considered to enhance social dominance, but findings from Ultimatum Game (UG) experiments show discrepancies. We conducted two experiments to explore the relationship between pre-existing social status and salivary T level among members of a rugby team at a Japanese university, where a strong seniority norm maintains hierarchical relationships. Two years after the first experiment, we replicated the experiment with participants from the same team. We analyzed participants' level of acquiescence (how much more they offered beyond the lowest offer they would accept) based on their decisions both as proposer and responder in a series of one-shot UGs. We found consistent evidence that higher T was associated with lower acquiescence in senior participants, but not in junior participants. In summary, our results suggest that T may enhance socially dominant behavior among higher-status persons, and that the effect of T on lower-status persons needs further investigation.





## **Keynote Address: Communication to the greatest individual and group level effect: Lessons from insects**

**by Anna Dornhaus**

**Introduced by Tamar Kugler**

**Anna Dornhaus** | *Professor of Ecology and Evolutionary Biology and Director of the Social Insect Laboratory, The University of Arizona*

Organization in groups—how collective behaviors emerge from the actions and interactions of individuals—is the main interest of Anna Dornhaus. As model systems, she studies social insect colonies (bumble bees, honey bees and ants) in the laboratory and in the field, as well as using mathematical and individual-based modeling approaches. She investigates mechanisms of coordination in foraging, collective decision-making, task allocation and division of labor. Her recent work has included the role of communication in the allocation of foragers to food sources; the evolution of different recruitment systems in different species of bees, and how ecology shapes these recruitment systems; house-hunting strategies in ants; speed-accuracy tradeoffs in decision-making; and whether different group sizes necessitate different organizational strategies.

### **Communication to the greatest individual and group level effect: Lessons from insects**

The group-level outcomes of individual behaviors can be hard to anticipate both in cooperative and non-cooperative groups. This leads to dilemmas not only when individual interests conflict, but also makes it hard to design effective group-level organization when they don't. Social insects like ants and bees have evolved a variety of strategies of group organization that may involve simple or flexible individual decision-making, adapted to a variety of environmental challenges. This makes them ideal study systems for bio-inspired organizational strategies; in particular, social insect colonies maintain high group-level robustness even when individual decisions are noisy/faulty. For example, insects search large spaces for resources, and individuals who find resources may communicate information about them using a variety of one-to-one, blackboard, beacon, or mass-communication systems (i.e. including 'push-' and 'pull-' information distribution). Each of these systems comes with its own benefits and costs in time investment, accuracy and speed of decisions, and scalability (effects of group size). A major tradeoff is the higher efficiency at exploiting found resources vs the capacity to quickly innovate and reallocate to new discoveries, which is strongly affected by the degree to which individuals rely on social information.



Poster Session 2  
Friday, June 7<sup>th</sup>, 2019  
8:00am~6:00pm

**Name:** Elena Wong

**Title:** Expanding the discourse surrounding sexual harassment: The case for considering experienced and observed hostile sexism, benevolent sexism, and gendered incivility

**Co-authors:** Nitya Chawla, Allison S. Gabriel

Medeiros and Griffith (2019) recently highlighting the tense public discourse when it comes to discussions of sexual harassment. In light of this, we expand the discussion beyond sexual harassment to consider interpersonal behaviors that may also contribute to negative work environments. More specifically, although Medeiros and Griffith (2019) allude to sexual harassment as overtly aggressive behaviors that occur sporadically, harassment in the workplace often has subtle forms that perpetuate sexism in a way that may not “fall on the radar” for organizations. Our paper elucidates three behaviors occurring within organizations that deserve greater attention: (a) hostile sexism, (b) benevolent sexism, and (c) gendered incivility. We urge scholars and practitioners alike to assess the prevalence and consequences of these behaviors in order to combat sexual harassment at work.

**Name:** Rebecca MacGowan

**Paper Title:** Examining Workplace Support for Breastfeeding Women at Work: A Fuzzy Set Approach

**Co-authors:** Sabrina Volpone, Allison Gabriel, Joanna Tochman Campbell, Christina Moran

Women returning to work post-partum face many challenges as they reintegrate into their day-to-day work routines. Of these challenges, one that is salient is navigating the complexities associated with breastfeeding while working full-time. Yet, little work has examined the ways in which organizations and coworkers can support women as they strive to obtain goals pertaining to their careers and families. Thus, we are addressing the following question: which forms of support are most helpful for breastfeeding women to feel balanced between work and family demands? We conducted a study with 118 women working full-time and utilized fuzzy set qualitative comparison analysis (fsQCA) to capture four configurations of support that are beneficial for women as they work towards having career identity commitment and balance effectiveness. In sum, we find specific configurations of support that help women balance work and breastfeeding, finding that informal support may be more impactful than formal practices.

**Name:** Rie Mashima

**Paper Title:** The effect of opportunity cost on strategies to maintain long-lasting relationships.

**Co-authors:** Nobuyuki Takahashi

Yamagishi (1998; 2011) argues that people in high opportunity cost societies develop skills to form new relationships as an adaptive strategy, while people in low opportunity cost societies do not. However, whether how to manage existing relationships are different between high and low opportunity cost societies is still unclear. We hypothesized that people in low opportunity cost societies develop skills for maintaining existing relationships more than people in high opportunity cost societies. We conducted a vignette experiment assessing respondents' behaviors to manage existing relationships. Respondents read a scenario describing a partner who had cooperated but turned to defect, and then reported their intention to pay the cost to maintain the relationship. We predict that the lower the level of opportunity cost in which respondents were embedded is, the more respondents will pay the cost to manage the existing relationship. We will report the detailed results at the conference.

**Name:** Yoshie Matsumoto

**Paper Title:** Are cooperators more likely to attack outgroup members in a competitive situation than defectors?

**Co-authors:** Nobuhiro Mifune, Dora Simunovic, Nobuyuki Takahashi, Toko Kiyonari, Toshio Yamagishi

In this work, we ask who is more likely to demonstrate out-group aggression: cooperators or defectors? According to the parochial altruism hypothesis, we would expect cooperative individuals to attack more often than defectors, especially in the presence of intergroup competition. Thus, we performed an experiment in two phases. After recording participants' cooperativeness in phase 1, we had them play two different versions of the preemptive strike game (PSG) to measure their outgroup-directed aggression. One version of the PSG was played between individuals, while the other was played between the groups, thus including intergroup competition. We found no support for the parochial altruism hypothesis. In fact, cooperators were less likely to attack individually, while cooperativeness was not related to the rate of collective attacks.



**Name:** Wakaba Tateishi

**Paper Title:** The effect of universal institutions on intergroup cooperation

**Co-authors:** Nobuyuki Takahashi

Although it has been widely shown that people engage in in-group favoritism, it is still unclear what enables cooperation beyond group boundaries. The current study proposes that the existence of universal institutions expands the boundary of expected generalized reciprocity so that people can expect that even out-group members would cooperate. The experiment used a sanction (control versus punishment) x group (in-group versus out-group) design. Participants played the PD game twice, with either an in-group or an out-group member. In the punishment condition, an institution subtracted money from those who gave less to their partners regardless of their group membership. The ANOVA of the amount given to the partner indicated the significant main effect of the sanction only. Thus, the hypothesis was not supported. Further analysis revealed that the manipulation of group membership was not sufficiently strong since in-group favoritism did not emerge even in the control condition.

**Name:** Jieyu LV

**Paper Title:** Praising Your Partner Promotes Dyadic Cooperation

**Author/Co-authors:** ZiXi LUO

Can praise promote cooperation in social dilemma? This study is aimed to address this research question by three laboratory experiments. Experiment 1 was designed to examine that allowing the communication platform for praising during the game will lead to a higher likelihood of dyadic cooperation. Experiment 2 was designed to examine that receiving praises during the game do not increase the likelihood of reaching mutual cooperation in 2-player public goods game. Experiment 3 was designed to examine that expressing praises towards your partner increases the likelihood of reaching mutual cooperation in 2-player public goods game. These experiments indicated that praising on specific task-related (cooperation) action is the most effective way and expressing praise towards others increase cooperative behavior.

**Name:** Ion Juvina

**Paper Title:** Overcoming effort avoidance

**Co-authors:** Kevin O'Neill, Alexander Hough, Peter Crowe, Michael Collins, Othalia Larue, Randall Green

Studies have shown that humans are generally reluctant to exert effort, either physical or cognitive, unless there are significant incentives, either extrinsic or intrinsic, to offset its subjective cost. Here we focus on several ways to overcome this effort avoidance bias, by using a set of specially designed games of strategic interaction. In Study 1, we use a modified version of the Tetris game called FlowTetris to induce a mental state of flow in the human participant, which has been associated with positive affect, high concentration, and decreased sensitivity to effort. In study 2, we use a modified version of the minimum effort game that displays both realized and forgone payoffs to help players learn to overcome their initial effort avoidance bias. In study 3, we use a peer-assisted learning (PAL) game to show that placing individuals in contexts of interdependence with other individuals increases their willingness to expend effort.

**Name:** Joanna Schug

**Paper Title:** Expectations of ingroup favoritism in a faith game

**Co-authors:** -

This study explored whether perceptions of relational mobility in one's local society (i.e., the degree to which it is easy for people to voluntarily form and terminate social relationships) predict expectations of ingroup favoritism in a modified faith game. The faith game (Kiyonari & Yamagishi, 1999) is similar to a trust game, with the exception that trusters cannot signal their trust to trustees. In this study, participants played a faith game by being paired with trustees who had taken part in a previous intergroup trust game. Participants were took the place of the truster from the previous study, and made four decisions in the role of an ingroup and outgroup member, interacting with an ingroup or outgroup member, respectively. Results indicated that participants who reported higher levels of relational mobility were less likely to expect ingroup favoritism, although relational mobility did not predict higher levels of trust.

**Name:** Sosuke Okada

**Paper Title:** When Donation is Seen as Suspect: the Effects of Signaling Environments on Charitable Giving and Trustworthiness

**Co-authors:** -

This study explores how charitable giving can be used as a signal of trustworthiness, focusing on how the signaling environments – in particular, the possibility that a donation is motivated for the signaling motive – will affect the dynamics of signaling and charitable giving. A laboratory experiments based on trust game was conducted to test the propositions. Contrary to the previous studies, donation was not used as a signal of trustworthiness, even though donators were more trustworthy than non-donators. Similarly, there is no evidence that the knowledge of subsequent trust game increased the likelihood of donations. However, the finding indicates that the awareness of the possibility that the donations were made for image motive may have reduced the level of transfer in the trust game, regardless of the actual donation made by their partner. The implications of the findings are discussed.



## **Closing Party by the Pool**

Hilton eforea Spa Pool

**Friday, June 7, 2019**

**6:30-8:30pm**

**Dinner and drinks will be served.**

Awards will be given at this time for the Best Student Talk  
and Best Student Poster.

# Participant List

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# Miscellaneous Information

## Important Locations near Sedona, AZ:

*Hilton Sedona Resort at Bell Rock*

90 Ridge Trail Dr, Sedona, AZ, US, 86351

(928) 284-4040

*NextCare Urgent Care*

2530 W State Route 89A Unit, Sedona, AZ, US, 86336

(928) 203-4813

*Sedona Police Department*

100 Roadrunner Dr., Sedona, AZ, US, 86336

(928) 282-3102

*Verde Valley Medical Center*

3700 AZ-89A, Sedona, AZ 86336

(928) 204-4100

*CVS Pharmacy*

20 Airport Rd., Sedona, AZ 86336

*Walmart Supercenter*

2003 E Rodeo Dr., Cottonwood, AZ 86326

*Crescent Moon Ranch Picnic Site*

333 Red Rock Crossing Rd., Sedona, AZ 86336

## Restaurants within walking distance of hotel:

*Juniper Bar & Grill @ Sedona Golf Resort*

35 Ridge Trail Dr

Sedona, AZ 86351

*The Collective Marketplace:*

7000 Hwy 179

Sedona, AZ 86351

- Cucina Rustica
- J Wine Bistro
- Miley's Café
- Rocky Rd. Ice Cream
- Corner Table Restaurant & Bar
- Full Moon Saloon
- Rotten Johnny's Wood-Fired Pizza Pie

## Taxi Services:

*Sedona Taxi*

(928) 362-0909

*Avor Taxi*

(928) 204-4444

## Conference Room WiFi:

Network Name: *Meeting*

No Password Needed

## For General Questions:

*Text Mariah Brown and Lauren Taylor*

(520) 261-4442

# *Special Thanks To:*

## **2019 Organizing Committee:**

Tamar Kugler (Chair) & Poonam Arora (Co-Chair)

## **ICSD Board:**

Poonam Arora, Daniel Balliet, Robert Bohm, Nancy Buchan, Tamar Kugler,  
Erik de Kwaadsteniet & Nobuyuki Takahashi

## **Conference Managers:**

Mariah Brown & Lauren Taylor

## **Student Interns:**

Mika Gisches & Chirag Kumar

## **Reviewers:**

Nancy Buchan, Nils van Doesum, Tony Evans, Ilan Fisher, Jurgen Fleiss, Nir Halevy, Denton Hatch, Cathleen Johnson, Toko Kiyonari, Nils Kobis, Martin Kocher, Laetitia Mulder, Ryan Murphy, Stefan Pfattheicher, Angelo Romano, Ann Rumble, Isabel Thielmann, Ori Weisel, Bohan Ye, & Junhui Wu

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Hillie Aaldering, Jennifer Anderson, Robert Bohm, Erik de Kwaadsteniet, Andreas Diekmann, Eyal Ert, Jimena Gonzalez-Ramirez, Eliran Halali, Eva Krackow, Jieyu LV, Welmer Molenmaker, Sherry Schneider, Amos Schurr, Gwendolyn Tedeschi, Ori Weisel & Alfred Zerres

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