5TH ANNUAL CONFERENCE

CONTESTS: THEORY AND EVIDENCE

27 - 28 JUNE 2019
<table>
<thead>
<tr>
<th>Time</th>
<th>Thursday 27 June</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:00 - 09:20</td>
<td>Registration</td>
</tr>
<tr>
<td>09:20 - 09:30</td>
<td>Inauguration</td>
</tr>
<tr>
<td>09:30 - 11:00</td>
<td>Parallel Sessions: 1 and 2</td>
</tr>
<tr>
<td>11:00 - 11:30</td>
<td>Coffee Break</td>
</tr>
<tr>
<td>11:30 - 12:30</td>
<td>Parallel Sessions: 3 and 4</td>
</tr>
<tr>
<td>12:30 - 13:30</td>
<td>Lunch</td>
</tr>
<tr>
<td>13:30 - 15:00</td>
<td>Parallel Sessions: 5 and 6</td>
</tr>
<tr>
<td>15:00 - 15:30</td>
<td>Coffee Break</td>
</tr>
<tr>
<td>15:30 - 17:00</td>
<td>Parallel Sessions: 7 and 8</td>
</tr>
<tr>
<td>18:30 - 20:30</td>
<td>Dinner</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Time</th>
<th>Friday 28 June</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:00 - 09:30</td>
<td>Late Registration</td>
</tr>
<tr>
<td>09:30 - 11:00</td>
<td>Parallel Sessions: 9 and 10</td>
</tr>
<tr>
<td>11:00 - 11:30</td>
<td>Coffee Break</td>
</tr>
<tr>
<td>11:30 - 12:30</td>
<td>Keynote Speech</td>
</tr>
<tr>
<td>12:30 - 13:30</td>
<td>Lunch</td>
</tr>
<tr>
<td>13:30 - 15:00</td>
<td>Parallel Sessions: 11 and 12</td>
</tr>
<tr>
<td>15:00 - 15:30</td>
<td>Coffee Break</td>
</tr>
<tr>
<td>15:30 - 17:00</td>
<td>Parallel Sessions: 13 and 14</td>
</tr>
<tr>
<td>18:00 - 20:30</td>
<td>Dinner</td>
</tr>
</tbody>
</table>
Welcome to this fifth edition of Contests: Theory and Evidence. This workshop series brings together researchers interested in contests, broadly defined, from theoretical, applied, and experimental perspectives. In addition to contributions to game theory, previous editions of this workshop have featured applications to voting, political economy, research and development, sports, and attitudes towards interpersonal and integroup comparisons. The series has brought together leading researchers from over 50 different institutions around the world here in Norwich. As the organisers we are pleased to have another excellent line-up of talks over the two days of the workshop, and look forward to discussions during the breaks and dinners as stimulating as in previous years.

Contests: Theory and Evidence is generously supported by the School of Economics and the Centre for Behavioural and Experimental Social Science.

THURSDAY 27 JUNE
FRIDAY 28 JUNE
ABSTRACTS
USEFUL INFORMATION
ATTENDANCE
THE VENUE
## THURSDAY 27 JUNE

### 09:00 - 09:30

**REGISTRATION & INAUGURATION**  
**FRONT DESK & CONFERENCE ROOM 1**

### 09:30 - 11:00

<table>
<thead>
<tr>
<th>SESSION 1 - CONFERENCE ROOM 1</th>
<th>SESSION 2 - CONFERENCE ROOM 2</th>
</tr>
</thead>
</table>
| **NETWORK**  
Chair: Toomas Hinnosaar (Collegio Carlo Alberto) | **AFFIRMATIVE ACTION**  
Chair: Joshua C. Teng (National Taipei University) |
| **Wing Fung Cheng** (HKUST): Envy of Neighbors: Contests with Network-Specific Externalities | **Matthias Dahm** (Nottingham): Minority Representation and Cost Effectiveness in Public Procurement |
| **Toomas Hinnosaar** (Carlo Alberto): Price Setting on a Network | **Joshua C. Teng** (National Taipei University): Preferences for Equality of Opportunity – Does the mechanism matter? |

### 11:00 - 11:30

**COFFEE BREAK**  
**AUDITORIUM**

### 11:30 - 12:30

<table>
<thead>
<tr>
<th>SESSION 3 - CONFERENCE ROOM 1</th>
<th>SESSION 4 - CONFERENCE ROOM 2</th>
</tr>
</thead>
</table>
| **RELATED TO LUIS CORCHON**  
Chair: Santiago Sanchez-Pages (KCL) | **BEHAVIOURAL SPILLOVER**  
Chair: Lingqing Jiang (Essex) |
| **Martin Grossman** (Zurich): Asymmetric Opportunities after Unsuccessful Contest Participation | **Francesco Fallucchi** (LISER): Validating survey questions on attitude to compete |
| **Santiago Sanchez-Pages** (KCL): Generalized difference-form contests | **Lingqing Jiang** (Essex): Splash with A Teammate: Peer Effects in High-Stakes Tournaments |

### 12:30 - 13:30

**LUNCH**  
**AUDITORIUM**
<table>
<thead>
<tr>
<th>Time</th>
<th>Session 5 - Conference Room 1</th>
<th>Session 6 - Conference Room 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>13:30 - 15:00</td>
<td><strong>GROUP 1</strong></td>
<td><strong>ENVIRONMENT 1</strong></td>
</tr>
<tr>
<td><strong>Chair:</strong></td>
<td>Alberto Vesperoni (AAU Klagenfurt)</td>
<td>Aner Sela (Ben-Gurion University)</td>
</tr>
<tr>
<td><strong>Marco Serena</strong> (MPI for Tax Law and Public Finance):</td>
<td>Winners Efforts in Team Contests</td>
<td>Yaakov Kareev (Hebrew University of Jerusalem): The sustainability game: A reverse contest to restrain emissions</td>
</tr>
<tr>
<td><strong>Alberto Vesperoni</strong> (AAU Klagenfurt):</td>
<td>The Locus of Conflict</td>
<td>Aner Sela (Ben-Gurion University): Reverse Contests</td>
</tr>
</tbody>
</table>

**COFFEE BREAK** - AUDITORIUM

<table>
<thead>
<tr>
<th>Time</th>
<th>Session 7 - Conference Room 1</th>
<th>Session 8 - Conference Room 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>15:00 - 15:30</td>
<td><strong>ATTACK &amp; DEFENSE</strong></td>
<td><strong>TOURNAMENT</strong></td>
</tr>
<tr>
<td><strong>Chair:</strong></td>
<td>Karl Wärneryd (Stockholm School of Economics)</td>
<td>Julia Wirtz (Bristol)</td>
</tr>
<tr>
<td><strong>Subhasish Chowdhury</strong> (Bath):</td>
<td>The Attack and Defense Conflict with the Gun and Butter Dilemma</td>
<td>Jian Song (George Mason): Asymmetric Shocks in Contests: Theory and Experiment</td>
</tr>
<tr>
<td><strong>Karl Wärneryd</strong> (Stockholm School of Economics):</td>
<td>Contests for Control</td>
<td>Julia Wirtz (Bristol): Relative performance feedback as identifier of better technologies. Theory and experimental evidence.</td>
</tr>
</tbody>
</table>

Dinner at **Ali Tandoori**, 9-11 Magdalen St, Norwich NR3 1LE
<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location/Chair/Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:00 - 09:30</td>
<td><strong>REGISTRATION - FRONT DESK</strong></td>
<td></td>
</tr>
<tr>
<td>09:30 - 11:00</td>
<td><strong>SESSION 9 - CONFERENCE ROOM 1</strong> MARKET</td>
<td><strong>SESSION 10 - CONFERENCE ROOM 2 GROUP 2</strong></td>
</tr>
<tr>
<td></td>
<td>Chair: Ben Zissimos (Exeter)</td>
<td>Chair: Francesco Trevisan (Edinburgh)</td>
</tr>
<tr>
<td></td>
<td>Zhewei Wang (Shandong): Performance Bundling across Multiple Competitions</td>
<td>Jeevant Rampal (IIM Ahmedabad): Contests within and between Groups</td>
</tr>
<tr>
<td></td>
<td>Ben Zissimos (Exeter): Contesting an International Trade Agreement</td>
<td>Francesco Trevisan (Edinburgh): Inequality within Groups in Competitive Environments: Theory and Experimental Evidences</td>
</tr>
<tr>
<td>11:00 - 11:30</td>
<td><strong>COFFEE BREAK - AUDITORIUM</strong></td>
<td></td>
</tr>
<tr>
<td>11:30 - 12:30</td>
<td><strong>KEYNOTE - CONFERENCE ROOM 1</strong> - Chair: Ted Turocy</td>
<td>Carmen Bevia (Alicante): What have we learned on war contests?</td>
</tr>
<tr>
<td></td>
<td>I revise what Luis Corchon and I have learned on war contests. In our first contribution, we studied the role of transfers as a mechanism to generate non-binding peaceful agreements. In our second contribution, we studied the role of strength in dynamic conflicts. Finally, we studied the role of bankruptcies that put one of the players out of action.</td>
<td></td>
</tr>
<tr>
<td>12:30 - 13:30</td>
<td><strong>LUNCH - AUDITORIUM</strong></td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>Session 1</td>
<td>Session 2</td>
</tr>
<tr>
<td>-------------</td>
<td>---------------------------------------------</td>
<td>----------------------------------------------</td>
</tr>
<tr>
<td>13:30 - 15:00</td>
<td><strong>SESSION 11 - CONFERENCE ROOM 1</strong></td>
<td><strong>SESSION 12 - CONFERENCE ROOM 2</strong></td>
</tr>
<tr>
<td></td>
<td><strong>INFORMATION</strong></td>
<td><strong>TULLOCK</strong></td>
</tr>
<tr>
<td></td>
<td>Chair: Priel Levy (Bar Ilan University)</td>
<td>Chair: Zenan Wu (Peking)</td>
</tr>
<tr>
<td></td>
<td><strong>Kyung nok Chun</strong> (California, Irvine): A</td>
<td><strong>Vimal Kumar</strong> (IIT Kanpur): Evolutionary</td>
</tr>
<tr>
<td></td>
<td>Fight Worth Having: Striking vs Bargaining</td>
<td>Role of Destruction and Settlement</td>
</tr>
<tr>
<td></td>
<td>when Future Union Power is at Stake</td>
<td>Norms as Determinants of Conflict</td>
</tr>
<tr>
<td></td>
<td><strong>Feng Zhu</strong> (Pennsylvania State): Creative</td>
<td><strong>Lambert Schoonbeek</strong> (Groningen): Cross-</td>
</tr>
<tr>
<td></td>
<td>Contest - Theory and Experiment</td>
<td>shareholdings in a rent-seeking contest</td>
</tr>
<tr>
<td></td>
<td><strong>Priel Levy</strong> (Bar Ilan University):</td>
<td><strong>Zenan Wu</strong> (Peking): Expectation-based</td>
</tr>
<tr>
<td></td>
<td>Selective Information Disclosure in</td>
<td>Loss Aversion in Contests</td>
</tr>
<tr>
<td></td>
<td>Contests</td>
<td></td>
</tr>
<tr>
<td>15:00 - 15:30</td>
<td>COFFEE BREAK - AUDITORIUM</td>
<td></td>
</tr>
<tr>
<td>15:30 - 17:00</td>
<td><strong>SESSION 13 - CONFERENCE ROOM 1</strong></td>
<td><strong>SESSION 14 - CONFERENCE ROOM 2</strong></td>
</tr>
<tr>
<td></td>
<td><strong>ALL-PAY</strong></td>
<td><strong>ENVIRONMENT 2</strong></td>
</tr>
<tr>
<td></td>
<td>Chair: Christopher Wilson (Loughborough)</td>
<td>Chair: Jonas Send (MPI for Tax Law and</td>
</tr>
<tr>
<td></td>
<td><strong>Jingfeng Lu</strong> (NU Singapore): Optimal</td>
<td>Public Finance)</td>
</tr>
<tr>
<td></td>
<td>Disclosure of Value Distribution Information</td>
<td><strong>Mike Brock</strong> (UEA): The Can Challenge:</td>
</tr>
<tr>
<td></td>
<td>in All-pay Auction</td>
<td>Exploring the Best Way to Incentivise</td>
</tr>
<tr>
<td></td>
<td><strong>Wojciech Olszewski</strong> (Northwestern</td>
<td>Recycling Effort</td>
</tr>
<tr>
<td></td>
<td>University): Equilibrium Existence in</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Games with Ties</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Christopher Wilson</strong> (Loughborough): All-</td>
<td><strong>Daniel Cardona</strong> (Balearic Islands):</td>
</tr>
<tr>
<td></td>
<td>Pay Contests and Price Competition: A</td>
<td>Environmental policy instruments and</td>
</tr>
<tr>
<td></td>
<td>Unified Framework</td>
<td>strategic restraint: caps versus taxes</td>
</tr>
<tr>
<td></td>
<td><strong>Jonas Send</strong> (MPI for Tax Law and</td>
<td><strong>Christopher Wilson</strong> (Loughborough):</td>
</tr>
<tr>
<td></td>
<td>Public Finance): Conflict between</td>
<td>All-Pay Contests and Price Competition: A</td>
</tr>
<tr>
<td></td>
<td>non-exclusive groups</td>
<td>Unified Framework</td>
</tr>
<tr>
<td></td>
<td><strong>Daniel Cardona</strong> (Balearic Islands):</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18:00</td>
<td>Dinner at BrewDog, 1 Queen Street, Norwich</td>
<td></td>
</tr>
<tr>
<td></td>
<td>NR2 4SG</td>
<td></td>
</tr>
</tbody>
</table>
SESSION 1 - NETWORK

THURSDAY 27 JUNE | 09:30 - 11:00
CONFERENCE ROOM 1
CHAIR: TOOMAS HINNOSAAR

PRESENTATION 1

**Envy of Neighbors: Contests with Network-Specific Externalities**

*Wing Fung Cheng* (The Hong Kong University of Science and Technology)

We examine how neighbor’s envy affect equilibrium behavior in a contest with two local networks. More envious individuals exert less effort in the full-participation equilibrium when aggregate envy in both networks are high. A network with more envious individuals has a lower probability of winning. The aggregate effort is non-decreasing with envy level in all equilibria.

PRESENTATION 2

**Multi-Battle Contests, Finite Automata, and the Tug-of-War**

*Christian Ewerhart* (University of Zurich),
*Co-authors: Julian Teichgräber*

We examine multi-battle contests whose extensive form can be represented as a finite state machine. Any contest satisfying our assumptions admits a unique symmetric Markov perfect equilibrium. In particular, we characterize the equilibrium of the tug-of-war. Finally, we explore the problem of a designer that maximizes expected total effort.

PRESENTATION 3

**Price Setting on a Network**

*Toomas Hinnosaar* (Collegio Carlo Alberto)

I characterize the unique equilibrium in a price-setting game on a network. The key distortion is multiple-marginalization and profits are proportional to a novel measure of network centrality. The results have implications for mergers and trade and apply to other situations---contests and public good provision on networks.
SESSION 2 - AFFIRMATIVE ACTION

THURSDAY 27 JUNE | 09:30 - 11:00
CONFERENCE ROOM 2
CHAIR: JOSHUA C. TENG

PRESENTATION 1

Minority Representation and Cost Effectiveness in Public Procurement
Matthias Dahm (University of Nottingham)
Co-authors: Jose Alcalde

We introduce affirmative action into a reverse share auction for dual sourcing. We provide an equivalence result between the equilibrium of an affirmative action program affecting the award rule and the equilibrium of a program providing a subsidy. We also show that affirmative action might reduce provision cost.

PRESENTATION 2

Dynamics of Discrimination in Labor Market Contests
Nishthma Sharma (University of California)

I study a two period contest with discrimination and group concerns. Bias in the second period depends on the result of the contest in the first period. The effect of a policy that reduces the inertia of bias on the probability of winning of the disadvantaged group is inverted U-shaped.

PRESENTATION 3

Preferences for Equality of Opportunity – Does the mechanism matter?
Joshua C. Teng (National Taipei University)
Co-authors: Steven J. Bosworth, Andreas Friedl

This experimental study tested three concepts of equality of opportunity. We found that everyone should be equally evaluated in contests is a more widely adopted views, while determining the winner according to the outcome of a lottery, which has been criticised by many, is a less prevalent preference.
PRESENTATION 1

**Asymmetric Opportunities after Unsuccessful Contest Participation**

**Martin Grossman** (University of Zurich)

Contestants have asymmetric opportunities if they do not succeed in the contest. Contestants’ entry decision depends on these opportunities. Greater opportunities reduce the risk to enter the contest but decrease the incentives to exert effort. Depending on the type of equilibrium, the individual effort is large and aggregate efforts are small or vice versa.

PRESENTATION 2

**Generalized difference-form contests**

**Santiago Sanchez-Pages** (King’s College London)

*Co-authors: María Cubel*

We analyze a family of contests where agents’ probability of victory depends on the difference between their efforts. We characterize conditions under which a pure-strategy equilibrium exists with at least two active contestants. We also study their equilibrium equivalence with rank-order tournaments and the effect of heterogeneity on total effort.
SESSION 4 - BEHAVIOURAL SPILLOVER

THURSDAY 27 JUNE | 11:30 - 12:30
CONFERENCE ROOM 2
CHAIR: LINGQING JIANG

PRESENTATION 1

Validating survey questions on attitude to compete
Francesco Fallucchi (LISER)
Co-authors: Daniele Nosenzo & Ernesto Reuben

We ask whether subjects’ self-reported answers to survey questions about willingness to compete can predict subjects’ elicited willingness to compete in incentivized experiments. We employ a short survey, administered to subjects 10 days prior to their participation to an incentivized experiment. We find a correlation between survey questions and competitive behavior in the lab.

PRESENTATION 2

Splash with A Teammate: Peer Effects in High-Stakes Tournaments
Lingqing Jiang (University of Essex)

I study whether having a teammate in the competing group affects individual performance in swimming. I apply a regression discontinuity design by comparing finalists’ performance when their teammate barely qualified or not qualified for the same finals. Female athletes accompanied by a teammate finished with less time and performed 0.75 to 1.16 ranks better in the finals. Male athletes’ performance is unaffected.
SESSION 5 - GROUP 1

THURSDAY 27 JUNE | 13:30 - 15:00
CONFERENCE ROOM 1
CHAIR: ALBERTO VESPERONI

PRESENTATION 1

Evolutionarily stable in-group altruism in intergroup conflict
Guillaume Cheikbossian (Université de Montpellier)

I provide an evolutionary explanation for the well-established evidence of the existence of in-group favoritism in intergroup conflicts. I show that the larger the number of competing groups, or the larger the degree of complementarity between individual efforts, the more likely group members are altruistic towards each other under preference evolution.

PRESENTATION 2

Winners Efforts in Team Contests
Marco Serena (Max Planck Institute for Tax Law and Public Finance)
Co-authors: Stefano Barbieri

All temporal structures of team, rather than individualistic, contests yield the same expected total effort, as shown by Fu, Lu, and Pan (2015). Rather than expected total effort, we analyze expected winners’ efforts, and show that they are maximized by a fully simultaneous and minimized by a fully sequential contest. This result thus parallels the conventional wisdom for individualistic contests.

PRESENTATION 3

The Locus of Conflict
Alberto Vesperoni (Alpen-Adria University Klagenfurt)
Co-authors: Roland Hodlery

We model ethnic conflict on a country’s territory where ethnic groups can contend ownership of resources both at the local and national level. A planner redistributes the yields of resources to prevent conflict. We characterize the welfare efficient transfer scheme and predict the probability of conflict at each location.
SESSION 6 - ENVIRONMENT 1

THURSDAY 27 JUNE | 13:30 - 15:00
CONFERENCE ROOM 2
CHAIR: ANER SELA

PRESENTATION 1

Efficiency-Enhancing Tullock Fines in a Common Pool Resource Problem
Jörg Franke (University of Bath)

We consider the classic tragedy of the commons or common pool resource problem where agents obtain private profits through individual extraction of the common pool resource inducing negative externalities on other agents. We analyse the efficiency-enhancing potential of probabilistic fines where the detection probability depends on the relative individual extraction levels of the agents.

PRESENTATION 2

The sustainability game: A reverse contest to restrain emissions
Yaakov Kareev (Hebrew University of Jerusalem)
Co-authors: Judith Avrahami, David Budescu

We devised a sustainability game that emulates the challenge induced by climate change, to curb greenhouse gases emissions. It is inspired by the overdissipation phenomenon observed in experimental contests. It is a “reverse” contest where the highest investor is punished. Two experiments show that this mechanism reduces investments and emissions.

PRESENTATION 3

Reverse Contests
Aner Sela (Ben-Gurion University of the Negev)

We analyze the equilibrium of a reverse contest with n agents each of whom has a linear reward function that increases in the agent’s effort. However, the effort of each agent has a negative effect on society, and therefore the designer imposes a punishment on the agent with the highest effort who caused the greatest damage.
PAINTATION 1

The Attack and Defense Conflict with the Gun and Butter Dilemma
Subhasish Chowdhury (University of Bath)
Co-authors: Iryna Topolyan

We analyze attack-and-defense with production. Players can allocate endowments either to produce gun or butter. If the Attacker wins then s/he appropriates Defender’s butter, otherwise they consume their own butter. We show that defenders may spend more on conflict than the attacker even without loss aversion, and that attackers may produce only guns.

PRESENTATION 2

Valuable Secrets and Big Data
Kai A. Konrad (Max Planck Institute for Tax Law and Public Finance)

This paper studies an attack-and-defense game. A web user likes to keep and protect valuable secrets from exploitation by a set of players and has private information about the type and number of secrets. The other players have multiple channels to tap information. Information protection and information tapping are costly.

PRESENTATION 3

Contests for Control
Karl Wärneryd (Stockholm School of Economics)

Two players compete for control of a productive asset. If the division of the surplus from use of the asset is itself contestable, in equilibrium the asset will end up with the player who can use it most productively. This is not always efficient, however.
SESSION 8 - TOURNAMENT

THURSDAY 27 JUNE | 15:30 - 17:00
CONFERENCE ROOM 2
CHAIR: JULIA WIRTZ

PRESENTATION 1

Asymmetric Shocks in Contests: Theory and Experiment
Jian Song (George Mason University)
Co-authors: Daniel Houser

We report data from laboratory experiments on tournaments with symmetric and left-skewed contest function shock distributions. We argue the latter reflect “elite” competitions (e.g., the Olympics). We find tournament winners to over-respond to threats or realizations of shocks from a left-skewed distribution; winners exert significantly greater effort under left-skewed shocks.

PRESENTATION 2

Endogenous risk and effort choices in a multiplicative tournament
Justus Spengler (WHU - Otto Beisheim School of Management)

A two-player tournament with endogenous multiplicative risk and effort choices is examined. Players differ in ability and handicap. In contrast to previous literature, risk does not necessarily reduce equilibrium efforts. The weaker player exerts more effort under risk. The principal can impact risk-taking and effort levels by adjusting the handicap.

PRESENTATION 3

Relative performance feedback as identifier of better technologies. Theory and experimental evidence.
Julia Wirtz (University of Bristol)
Co-authors: Gwen-Jiro Clochard, Guillaume Hollard

In a RCT where students participate in a maths tournament we find that providing rank information increases performance across the distribution. Theoretically, this is often explained through a taste for rank. We provide an alternative explanation. Rank information allows the students to improve continually by identifying and adopting better technologies.
SESSION 9 - MARKET

FRIDAY 28 JUNE | 09:30 - 11:00
CONFERENCE ROOM 1
CHAIR: BEN ZISSIMOS

PRESENTATION 1

Resale Price Maintenance in a Model of Sales
Dan Kovenock (Chapman)
Co-authors: Michael Baye, Carsten deVries

We examine the effect of a price floor in an extension of Varian’s (1980) model of sales with an asymmetric number of loyal customers. When such a floor is imposed upon retailers by the manufacturer, it is known as resale price maintenance. We show that a suitably chosen floor may decrease average retail prices and increase the manufacturer’s sales.

PRESENTATION 2

Performance Bundling across Multiple Competitions
Zhewei Wang (Shandong University)
Co-authors: Jingfeng Lu, Bo Shen

In this paper, we study performance bundling across multiple competitions between two (possibly asymmetric) players. We find that in addition to a beneficial cost-saving effect, performance bundling causes a counterproductive unbalancing effect. Performance bundling is desirable if and only if the players are sufficiently symmetric.

PRESENTATION 3

Contesting an International Trade Agreement
Ben Zissimos (University of Exeter)
Co-authors: Matthew T. Coley, James Lakez

We develop a new theoretical political economy framework, called a ‘parallel contest,’ to model trade agreement (TA) ratification, where interest groups contest their government’s ratification decision. The key feature of our parallel contest is that each interest group’s contest success function depends on the ratification probability of the other country.
PRESENTATION 1

Contests within and between Groups
Jeevant Rampal (Indian Institute of Management Ahmedabad)
Co-authors: Puja Bhattacharya

Using theory and experiments, we study a two-stage group contest where first-stage intra-group contests are followed by a second-stage inter-group contest. Only winners of the inter-group contest get rewards. Winners of the intra-group contest within that group receive a greater reward. Equilibrium is characterized and compared with behavior in experiments.

PRESENTATION 2

Polarization or Moderation? Intra-group heterogeneity in endogenous-policy contests
Antoni Rubí Barceló (University of the Balearic Islands)
Co-authors: Daniel Cardona, Jenny De Freitas

When the heterogeneous members of a party must select the target-policy they will fight for in a subsequent contest, they must consider the effects of this choice on the mobilization of both partisans and opponents. We show how either polarization or moderation of the target-policy may emerge from the interaction between these effects.

PRESENTATION 3

Inequality within Groups in Competitive Environments: Theory and Experimental Evidences
Francesco Trevisan (University of Edinburgh)
Co-authors: Mingye Ma

We characterize the allocation that maximizes group effort in a model of contests and experimentally test our predictions on the effects of within group inequality. We show that introducing inequality in rewards or ability does not generate competitive advantage, but a combination of the two increases the group effort significantly.
SESSION 11 - INFORMATION

FRIDAY 28 JUNE | 13:30 - 15:00
CONFERENCE ROOM 1
CHAIR: PRIEL LEVY

PRESENTATION 1

A Fight Worth Having: Striking vs Bargaining when Future Union Power is at Stake
Kyung nok Chun (University of California - Irvine)

This paper demonstrates that fully informed, rational actors can choose to go on strike rather than bargain if winning a strike changes the relative advantages of the parties in future disputes. This result sheds some light on the patterns of US strike waves in the long 20th century.

PRESENTATION 2

Creative Contest - Theory and Experiment
Feng Zhu (Pennsylvania State University)

This paper introduces “creative contests”. Examples include architecture contests and logo design contests. I solve for equilibrium and apply it to the contest organizer’s information disclosure problem. He is willing to disclose information only when bidding cost is low. Lab experiment results are largely consistent with model predictions.

PRESENTATION 3

Selective Information Disclosure in Contests
Priel Levy (Ilan University, Israel)
Co-authors: David Sarne and Yonatan Aumann

We study temporal information design in contests, specifically selectively providing players information about participation and performance of others along time. The information disclosed results in a mixture of parallel and sequential contest phases. We consider two contest variants: (a) binary contests (where contestants’ decisions concern only the aspect of participation) and (b) Tullock contests.
Evolutionary Role of Destruction and Settlement Norms as Determinants of Conflict
Vimal Kumar (Indian Institute of Technology Kanpur)
Co-authors: Gopal Sharan Parashari

We investigate if the adversaries accept winning probabilities as division rules under negotiated settlement given the considerable cost associated with open fight. Adversaries regard winning probabilities as acceptable settlement rule only when they are identical in terms of vulnerability in conflict, and the norms with positive weight to disagreement payoff are effective against conflict, and incentivize peace.

Cross-shareholdings in a rent-seeking contest
Lambert Schoonbeek (University of Groningen)
Co-authors: Pim Heijnen

We consider a Tullock rent-seeking contest with two bidders with silent minority cross-shareholdings. We provide the necessary and sufficient conditions under which equilibrium rent dissipation in that contest is larger than in the benchmark case without cross-shareholdings.

Expectation-based Loss Aversion in Contests
Zenan Wu (Peking University)
Co-authors: Qiang Fu, Youji Lyu, Yuanjie Zhang

We study a multi-player asymmetric Tullock contest in which contestants exhibit reference-dependent loss aversion a la Koszegi and Rabin (2006, 2007). Contestants’ equilibrium effort may either increase or decrease. However, loss aversion always leads to an elitist distributional outcome. Further, we explore the optimal contest design under loss aversion.
SESSION 13 - ALL-PAY AUCTION

FRIDAY 28 JUNE | 15:30 - 17:00
CONFERENCE ROOM 1
CHAIR: CHRISTOPHER WILSON

PRESENTATION 1

Optimal Disclosure of Value Distribution Information in All-pay Auction
Jingfeng Lu (National University of Singapore)
Co-authors: Zijia Wang

We study the seller-optimal policy of disclosing players’ value distribution information in an all-pay auction setting. The players observe their values privately, but they do not observe the prevailing value distribution. The seller designs a public signal to optimally disclose the information about value distribution, which maximizes players’ effort supply.

PRESENTATION 2

Equilibrium Existence in Games with Ties
Wojciech Olszewski (Northwestern University)
Co-authors: Ron Siegel

We prove the existence of equilibria for a class of games with discontinuous payoffs. Our class of games includes: (a) a general version of all-pay contests, (b) first-prize auctions with interdependent values, and (c) Hotelling models with incomplete information.

PRESENTATION 3

All-Pay Contests and Price Competition: A Unified Framework
Christopher Wilson (Loughborough University)
Co-authors: Sandro Shelegia

Some important contests have ‘default allocations’ where the prize is still awarded even when no player actively competes. We analyze default allocations in a general full-information all-pay contest framework. This formally connects all-pay contests and ‘clearinghouse’ oligopoly sales models. We also study default allocations in terms of optimal contest design.
SESSION 14 - ENVIRONMENT 2

FRIDAY 28 JUNE | 15:30 - 17:00
CONFERENCES ROOM 2
CHAIR: JONAS SEND

PRESENTATION 1

The Can Challenge: Exploring the Best Way to Incentivise Recycling Effort
Mike Brock (University of East Anglia)
Co-authors: Stefania Sitzia, Jiwei Zheng

The UK Government are actively considering the implementation of a Deposit Return Scheme on drinks containers. This fieldwork implements two incentives-mechanisms across three treatments to assess which yields greater levels of recycling. For contests economics, the results ask whether Tullock Contests instil greater effort levels than its (pay-off-equivalent) piece-rate task.

PRESENTATION 2

Environmental policy instruments and strategic restraint: caps versus taxes
Daniel Cardona (University of the Balearic Islands)
Co-authors: Jenny De Freitas, Antoni Rubí Barceló

In this study two lobbyists (a monopolist and environmentalists) decide the target-policy they will defend in a subsequent contest. We show that the target-policy choice, and then, expected emissions and welfare, crucially depends on whether taxes or caps are used to regulate emissions.

PRESENTATION 3

Conflict between non-exclusive groups
Jonas Send (Max Planck Institute for Tax Law and Public Finance)

I model group conflict over a single public-good prize in which individuals can exert effort for multiple groups simultaneously. In a simple framework, I investigate group size asymmetry, income effects, and the formation of an additional group. In a more general model, I characterise Nash equilibria.
USEFUL INFORMATION

If you have any questions, please speak to one of our local hosts!

- Ted Turocy (T.Turocy@uea.ac.uk)
- Subhasish M. Chowdhury (S.M.Chowdhury@bath.ac.uk)
- Tom Cushan (T.Cushan@uea.ac.uk)

CONFERENCE VENUE

- The conference will be held at the King’s Centre (63-75 King Street, Norwich NR1 1PH, UK: http://www.kings-centre.com) in the heart of the Norwich city centre.
- The Conference Rooms are located at the 1st floor (in the British system – i.e., 2nd floor in the American system).
- There is a back-room to keep luggage etc. next to ‘Conference Room 1’.
- Coffee and Lunch will be served in the Auditoreum
- Search for ‘The Kings Centre WiFi’ and at the Log in screen click ‘Continue to the Internet’.

TRANSPORT

- Norwich is well connected by train and bus with London, and by flight with Amsterdam.
- The conference venue is really a walking distance from both the train and the bus station.
- Local Bus: There are two buses (number 25 and 26) that depart from the railway station. You will have to get down at the Castle Meadow stop to go to the conference venue.
- Taxis: It is advisable to book taxis early on over phone. Some of the local taxis are: Goldstar: +44 1603 700 700, Five Star: +44 1603 555 555, ABC: +44 1603 666 333

CONFERENCE DINNERS

- The Dinner on Thursday (27th) will be at Ali Tandoori (http://www.alitandoori.co.uk/)
- The Dinner on Friday (28th) will be at BrewDog (https://www.brewdog.com/bars/uk/brewdog-norwich)
- Both are of walking distances from the conference venue. Ask a local host for directions!
Norwich is a friendly and diverse city, both vibrant and attractive. A hotbed for the arts, culture and tourism, it is a city full of stunning architecture. Norwich has a Norman Cathedral and a 12th Century Castle, as well as an open-air market, a range of independent shops in the Norwich Lanes, and restaurants, cinemas, galleries, theatres, cafes and pubs.

The City’s medieval centre of cobbled streets remains largely intact, but there is still space for modern buildings such as the Forum, a stunning piece of contemporary architecture. Its glass front overlooks the colourful six-day market and reflects the city in all its diversity.

For further information about Norwich;

http://www.visitnorwich.co.uk/
http://www.visitnorfolk.co.uk/explore/Norwich.aspx

**ACCOMODATION**

There are many hotels in Norwich which can be found on various websites, due to the central location of the venue most city centre hotels should be suitable.

- **The Maid's Head Hotel** a 5-6 minutes’ walk to the conference venue, not a budget option.
- **Premiere Inn - Nelson**: just next to the train station and is 6-7 minutes’ walk.
- **Travelodge Riverside**: a 4 minutes’ walk and one of the cheapest no-frill option.
ATTENDEES

- **Dalal Alotaibi** (University of East Anglia)
- **Judith Avrahami** (The Hebrew University)
- **Carmen Bevia** (University of Alicante)
- **Mike Brock** (University of East Anglia)
- **Daniel Cardona** (Universitat de les Illes Balears)
- **Guillaume Cheikbossian** (University Montpellier)
- **Wing Fung Cheng** (HKUST)
- **Subhasish Chowdhury** (University of Bath)
- **Kyung nok Chun** (University of California- Irvine)
- **Luis Corchon** (Universidad Carlos III de Madrid)
- **Sebastian Cortes** (University of Leicester)
- **Matthias Dahm** (University of Nottingham)
- **Christian Ewerhart** (University of Zurich)
- **Francesco Fallucchi** (LISER)
- **Jörg Franke** (University of Bath)
- **Yuan Gao** (University of East Anglia)
- **Martin Grossman** (University of Zurich)
- **Yiquan Gu** (University of Liverpool)
- **Toomas Hinnosaar** (Collegio Carlo Alberto)
- **Lingqing Jiang** (University of Essex)
- **Yaakov Kareev** (The Hebrew University of Jerusalem)
- **Kai Konrad** (MPI for Tax Law and Public Finance)
- **Dan Kovenock** (Chapman University)
- **Vimal Kumar** (Indian Institute of Technology Kanpur)
- **Mark Le Quement** (University of East Anglia)
- **Priel Levy** (Bar Ilan University)
- **Jingfeng Lu** (National University of Singapore)
- **Wojciech Olszewski** (Northwestern University)
- **Arnold Polanski** (University of East Anglia)
- **Jeevant Rampal** (IIM Ahmedabad)
ATTENDEES

- Toni Rubí Barceló (Universitat de les Illes Balears)
- Santiago Sanchez-Pages (King’s College London)
- Lambert Schoonbeek (University of Groningen)
- Aner Sela (Ben-Gurion University)
- Jonas Send (MPI for Tax Law and Public Finance)
- Marco Serena (MPI for Tax Law Public Finance)
- Nishtha Sharma (University of California- Irvine)
- Stefania Sitzia (University of East Anglia)
- Jian Song (George Mason University)
- Justus Spengler (WHU - Otto Beisheim School of Management)
- Joshua Teng (National Taipei University)
- Francesco Trevisan (University of Edinburgh)
- Orestis Troumpounis (University of Lancaster)
- Theodore Turocy (University of East Anglia)
- Alberto Vesperoni (AAU Klagenfurt)
- Zhewei Wang (Shandong University)
- Karl Warneryd (Stockholm School of Economics)
- Chris Wilson (Loughborough University)
- Julia Wirtz (University of Bristol)
- Zenan Wu (Peking University)
- Anil Yildizparlak (Durham University)
- Jiwei Zheng (University of East Anglia)
- Feng Zhu (Penn State University)
- Ben Zissimos (University of Exeter)