THE $6^{\text {TH }}$

# MURAT SERTEL WORKSHOP 

ON ECONOMIC DESIGN, DECISION, INSTITUTIONS, AND ORGANIZATION

in honor of Gilbert Laffond

September 23-24 2016
Conservatoire National des Arts et Métiers
Amphithéâtre Aimé Laussedat
2 rue Conté, accès 31
75003 Paris, France
le cnam

İstanbul<br>Bilgi University

LaUREATE INTERNATIONAL UNIVERSITIES

## Participants

1. Fuad Aleskerov (National Research University Higher School of Economics and Institute of Control Sciences of Russian Academy of Sciences, Moscow, Russia)
2. Ahmet Alkan (Sabanci University)
3. Fatma Aslan (Istanbul Bilgi University)
4. Salvador Barbera (Universidad Autonoma de Barcelona)
5. Mehmet Barlo (Sabanci University)
6. Francis Bloch (Paris School of Economics)
7. Anna Bogomolnaia (Glasgow University)
8. Nicolas Curien (Conseil Supérieur de l'Audiovisuel, France)
9. Gabrielle Demange (Ecole des Hautes Etudes en Sciences Sociales, Paris, France)
10. André de Palma (Ecole Normale Supérieure de Cachan)
11. Hayrullah Dindar (Istanbul Bilgi University)
12. Onur Dogan (Istanbul Bilgi University)
13. Emre Ergin (University of Maastricht)
14. Ayça Ebru Giritligil (Istanbul Bilgi University)
15. Nicolas Gravel (University of Aix-Marseille)
16. Karim Kilani (Conservatoire National des Arts \& Métiers)
17. Semih Koray (Bilkent University)
18. Gilbert Laffond (Conservatoire National des Arts \& Métiers)
19. Jean Lainé (Conservatoire National des Arts \& Métiers, and Murat Sertel Center for Advanced Economic Studies)
20. Annick Laruelle (University of the Basque Country \& Ikerbasque)
21. Jean-François Laslier (Paris School of Economics)
22. Jacques Lesourne
23. Hervé Moulin (Glasgow University)
24. Vincent Merlin (University of Caen)
25. François Moreau (University of Paris 13)
26. Saptarshi Mukherjee (Indian Institute of Technology Delhi)
27. Matias Nunez (University of Paris-Dauphine)
28. Ipek Özkal-Sanver (Istanbul Bilgi University)
29. Ali Ihsan Özkes (University of Aix-Marseille)
30. Thérèse Rebière (Conservatoire National des Arts \& Métiers)
31. Maurice Salles (University of Caen)
32. Remzi Sanver (Istanbul Bilgi University and University of Paris-Dauphine)
33. William Thomson (University of Rochester)
34. Alain Trannoy (University of Aix-Marseille)
35. Walter Trockel (Bielefeld University and Istanbul Bilgi University)
36. Federico Valenciano (University of the Basque Country)

## Program Overview

## Friday September 23

- 9:30-9:45 Opening session
- 9:45-10:45 Collective Choice and Voting I
- 10:45-11:15 Coffee break
- 11:15-12:15 Choice and Behavior
- 12:15-14:00 Lunch
- 14:00-15:30 Games and Bargaining I
- 15:30-16:00 Coffee break
- 16:00-17:00 Goods, Bads, but No Ugly
- 17:00-18:00 Collective Choice and Voting II
- 18:30-22:00 Reception/Dinner in honor of Gilbert Laffond) (Salon d'honneur du conservatoire, access 37-1-49, 2 rue Conté)


## Saturday September 24

- 9:00-10:00 Strategy-proofness and Implementation
- 10:00-11:00 Networks
- 11:00-11:30 Coffee break
- 11:30-12:30 Ranking
- 12:30-14:00 Lunch
- 14:00-15:30 Games and Bargaining II
- 15:30-16:00 Coffee break
- 16:00-17:30 Labour and Education
- 17:30-18:30 Collective Choice and Voting III
- 19:30-23:00 Dinner (Restaurant "Au Bascou", 38 rue Raumur, 75003 Paris)


## Sessions

## September 23

## Collective Choice and Voting I (9:45-10:45)

1. Hayrullah Dindar (Istanbul Bilgi University), Party-list Proportional Representation in Partisan Politics: A New Voting Paradox (joint with Gilbert Laffond and Jean Lainé)
2. Jean-François Laslier (Paris School of Economics), Modeling Representation of Minorities Under Multiwinner Voting Rules (joint with Piotr Faliszewski, Robert Scheafer, Piotr Skowron, Arkadii Slinko, and Nimrod Talmon)

Choice and Behavior (11:15-12:15)

1. Ali Ihsan Özkes (University of Aix-Marseille), The Impact of Communication on Cooperation in Experimental Games of Strategic Complements and Substitutes (joint with Nobuyuki Hanaki)
2. Salvador Barberà (Universidad Autonoma de Barcelona), Ordinal Relative Satisficing Behavior (joint with Alejandro Neme)

## Games and Bargaining I (14:00-15:30)

1. Francis Bloch (Paris School of Economics), Coalition Bargaining on Multiple Issues
2. Semih Koray (Bilkent University), Every Member of the Core is as Respectful as Any Other
3. Ayça Ebru Giritligil (Istanbul Bilgi University), Effort, Luck, and Role Selection in Bargaining over Jointly Produced Assets: An Experiment (joint with Emin Karagozoglu)

Goods, Bads, but No Ugly (16:00-17:00)

1. Anna Bogomolnaia (Glasgow University), On the Fair Division of Goods
2. Hervé Moulin (Glasgow University), On the Fair Division of Bads

## Collective Choice and Voting II (17:00-18:00)

1. Emre Ergin (University of Maastricht), When are Minorities Strategically Negligible in Representative Democracies? (joint with Burak Can)
2. Maurice Salles (University of Caen), Social Choice and the Capability Approach

## September 24

Strategy-proofness and Implementation (9:00-10:00)

1. Matias Nunez (University of Paris-Dauphine), Reaching Consensus Through Approval Bargaining (joint with Jean-François Laslier, Carlos Pimienta )
2. Onur Dogan (Istanbul Bilgi University), Strategic Manipulation of Social Welfare Functions via Strict Preference Extensions (joint with Jean Lainé)

Networks (10:00-11:00)

1. Federico Valenciano (University of the Basque Country), A 'Marginalist' Model of Network Formation (joint with Norma Olaizola)
2. Fuad Aleskerov (National Research University Higher School of Economics and Institute of Control Sciences of Russian Academy of Sciences, Moscow, Russia), Power in Network Structures

Ranking (11:30-12:30)

1. Gabrielle Demange (Ecole Normale Supérieure, PSE), Mutual Rankings
2. Nicolas Gravel (University of Aix-Marseille), Ranking Distributions of an Ordinal Attribute (joint with Brice Magdalou and Patrick Moyes)

Games and Bargaining II (14:00-15:30)

1. William Thomson (University of Rochester), On the Adjudication of Conflicting Claims
2. Alain Trannoy (University of Aix-Marseille, Ecole des hautes Etudes en Sciences Sociales), Was Raymond Poincaré (The President of the French Republic in July 1914) a Game Player or a Gambler?
3. Saptarshi Mukherjee (Indian Institute of Technology Delhi), Implementation in Undominated Strategies with Partially Honest Agents (joint with Nozomu Muto)

Labour and Education (16:00-17:30)

1. Fatma Aslan (Istanbul Bilgi University), Designing Job Mobility of Couples when Distance Matters (joint with Jean Lainé)
2. Mehmet Barlo (Sabanci University), Spillovers between Skilled and Low Skilled Labor Migration in a Multi-Regional Setting
3. Ahmet Alkan (Sabanci University), Does School Matter? Value-Added at Higly Selective Schools (joint with Sinan Sarpça)

## Collective Choice and Voting III (17:30-18:30)

1. Vincent Merlin (University of Caen), Abstention and Referendum Paradoxes for Scoring Run-off Rules on the Single-peaked Domain (joint with Faty Top and Eric Kamwa)
2. Annick Laruelle (University of the Basque Country and Ikerbasque), To Disqualify or Not to Qualify: This is the Other Question (joint with José Carlos R. Alcantud)

## Practical Details

## Sessions

All sessions and coffee break will take place in Amphithéâtre Aimé Laussedat, 2 rue Conté, accès 31, 75003 Paris (see number 31 in the link http://cedric.cnam.fr/ ~courtiep/planCnam/plan_Cnam_3e_arrondissement.html).

Please always have with you an ID, which you will have to show each time you enter the building. Due to the richness of our program, each presentation will be 30 minutes long, including 5 minutes for short comments and questions.

## How to access the workshop

The closest metro station is Arts et Métiers (Metro line 3). Other stations are Réaumur Sébastopol (line 4) and Strasbourg Saint Denis (Lines 4, 8, and 9). When exiting station Arts et Métiers, cross rue Réaumur (you will see the entrance of the museum of Arts et Métiers), and follow rue Vaucansson for around 40 meters. The rue Conté is the first on your right. Once you pass the entrance, you will find the staircase towards the amphitheater Laussedat on your right (access No 31, 3rd floor).

## Accommodation

For those who asked for accommodation, your hotel is Hôtel Bellevue Chariot d'Or, 39 rue Turbigo 75003 Paris, +33 (0)1 488745 60, chariotdor@orange.fr, website: http://www.hotel-bellevue-chariot-or.fr/). When exiting the hotel on the left, you will find the metro station Arts et Métiers after less than 5 -minute walk.

The nights Sept 22-23, Sept 23-24, and Sept $24-25$ are prepaid (including breakfast), except for the Bilgi members of the Murat Sertel Center (thanks to the center for its financial support). All participants having booked extra nights or extra rooms/beds will have to pay at the desk.


## BOOK OF ABSTRACTS

THE $6^{\text {TH }}$
MURAT SERTEL WORKSHOP
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le cnam

## Friday, September 23

## 9:45-10:45

## Collective Choice and Voting I

1. Hayrullah Dindar (Istanbul Bilgi University), Gilbert Laffond (LIRSA, Conservatoire National des Arts et Mtiers, Murat Sertel Center for Advanced Economic Studies), Jean LainLIRSA, Conservatoire National des Arts et Mtiers, Murat Sertel Center for Advanced Economic Studies)
Title: Party-list Proportional Representation in Partisan Politics: A New Voting Paradox

We show that the outcome of indirect elections under party-list proportional representation, where party platforms are endogenously determined by their supporters preferences, may lead to an outcome that is Pareto-dominated by the direct elections outcome even when no group of supporters of one party has an incentive to leave that party and join another one.
2. Jean François Laslier (Paris School of Economics), Piotr Faliszewski (AGH University) France Robert Scheafer,(AGH University), Piotr Skowron,(Oxford University), Arkadii Slinko (University of Auckland), Nimrod Talmon (Weizmann Institute of Science)

## Title: Modeling Representation of Minorities under Multiwinner Voting Rules

The goal of this paper is twofold. First and foremost, we aim to experimentally and quantitatively show that the choice of a multiwinner voting rule can play a crucial role on the way minorities are represented. We also test the possibility for some of these rules to achieve proportional representation.

## 11:15-12:15

## Choice and Behavior

1. Ali Ihsan Ozkes (University of Aix-Marseille), ), Noboyuki Hanaki (University of Nice)

Title: The Impact of Communication on Cooperation in Experimental Games of Strategic Complements and Substitutes

In this paper we investigate the impact of communication on levels of cooperation in oligopoly markets. Our method is experimental, where we put the theoretical predictions into test in a lab experiment. Specifically, we ask how does the impact of free-form communication (cheap talk) on cooperation in duopoly markets depend on whether strategic reactions exhibit complementarity or substitutability. In attempting at this question for the first time, we align -to the extent possible- with the major works in previous literature. Particularly, our work is built upon the strand of the literature that carefully singled out the effect of strategic properties on tacit collusion in oligopoly markets, by controlling for framing, externalities, absolute values of the slopes of reaction curves, equilibria, and collusive outcomes. More precisely, we build on Potters and Suetens (2009) by adding market frame and communication treatments as well as a post-experimental cognitive skills test, to a baseline with positive externality quantity-setting game with neutral framing. Due to our design, aside from testing for replicability of previous results on tacit collusion, we are able to analyze furthermore, first, the relevance of cognitive skills to cooperation levels, second, what sort of matchings of agents with different cognitive skills can be socially optimal, and third, the effect of market framing.
2. Salvador Barberà (Universidad Autonoma de Barcelona), Alejandro Neme (Universidad Nacional de San Luis) Title: Ordinal Relative Satisficing Behavior

We propose a notion of rrationality, a relative version of satisficing behavior based on the idea that, for any set of available alternatives, individuals choose one of their r-best according to a single preference order. We fully characterize the choice functions satisfying the condition for any r, and provide an algorithm to compute the maximal degree of rationality associated with any given choice function. The notion is extended to individuals whose r may vary with the set of available alternatives. Special cases of ordinal relative satisficing behavior result from a variety of choice models proposed in the literature.

## 14:00-15:30

## Games and Bargaining I

## 1. Francis Bloch (Paris School of Economics)

## Title: Coalition Bargaining on Multiple Issues

This paper analyzes a model of coalition bargaining among three players with two issues. The underlying structure is a pair of TU coalition games. Players in the bargaining procedure can make offers on one of the two issues or bundle the two issues (endogenous agenda). The analysis characterizes conditions under which players efficiently make joint proposals on the two issues, or successively reach agreement on the two issues. It also shows that in a large number of cases, the equilibrium must involve mixing over the two issues.
2. Semih Koray (Bilkent University), Yasemin Dede (Bilkent University)

## Title: Every Member of the Core is as Respectful as Any Other

Given any member w of the core of a convex transferable utility (TU) game G, can one specify a richer structure consistent with G, which will single out w as the only cooperative outcome in the sense that no coalition can improve upon w? That is the question this paper deals with. A natural candidate for such a richer structure is a strategic form game that induces the given TU game under the maxmin operator, which also renders the -core as the spiritual counterpart of the core in a strategic environment. However, the -core as defined by Aumann (1961) assumes nontransferability of utility. By introducing transferability of utility to strategic form games, we modify the notion of -core. The members of the -core of a strategic form game under full transferability turn out to belong to the core of the TU game induced under the maxmin operator. Conversely, we construct a canonical family of finite strategic form games such that, for each core allocation w of each TU game G, there is a preimage of G in the canonical family whose finitely many -core allocations include w. Drawing attention to the similarity of this construct to the method of singling out certain Nash equilibria of a strategic form game $g$ as subgame perfect equilibria of a richer extensive form structure consistent with g introduced by Selten (1975), we also note that everything said above continues to hold if we replace the -core by the -core, provided that the TU game induced by a strategic form game is now obtained employing the minmax operator.
3. Ayça Ebru Giritligil (Istanbul Bilgi University), Emin Karagozoglu (Bilkent University)

Title: Effort, Luck, and Role Selection in Bargaining over Jointly Produced Assets: An Experiment

In this study, we aim to experimentally investigate the effects of contribution-method assignment techniques and enlarging the scope of bargaining to include the production stage on bargaining behavior and outcomes in bargaining games with joint production are experimentally investigated. The surplus is generated jointly by the parties through working on a real-effort task or spinning a wheel of fortune. The experimental treatments are based on the assignment method of these tasks to the parties. In treatment 1, one of the two tasks (working on a real-effort task or spinning a wheel
of fortune) is randomly assigned to each party whereas in treatment 2, each party chooses himself the task through which he will contribute to the joint production. As the joint surplus is generated, using a tacit bargaining protocol, the parties are asked to bargain on how to share this surplus. Main findings of this study can be listed as: (i) when the contributions to the joint surplus are different, agreements in the second treatment are closer to the proportional division, (ii) when the contributions to the surplus are different, equal divisions are more frequently observed in the first treatment, (iii) when the roles are different, the average bargaining duration is longer, (iv) when the contributions are different, the average bargaining duration is longer, and (v) parties start negotiation with larger conflict and it takes a longer time for them to reach an agreement in the second treatment.

## 16:00-17:00

## Goods, Bads, but No Ugly

1. Anna Bogomolnaia (Glasgow University), Hervé Moulin (Glasgow University),

Titles: On the Fair Division of Goods, On the Fair Division of Bads
Modern economic analysis mostly dismisses additive utilities that ignore complementarities between commodities. But recent work on the practical implementation of fair division rules in user-friendly websites (Spliddit, Adjusted Winner) gives a central role to this simple preference domain for compelling practical reasons, and brings back into sharp focus the 1959 results of Eisenberg and Gale on linear economies. Think of distributing the family heirlooms between siblings, splitting the assets of a divorcing couple, or allocating job shifts between substitutable workers: most people cannot form sophisticated preferences described by general utility functions, just like participants in a combinatorial auction do not form a complete ranking of all subsets of objects. Thus individual preferences are elicited by a simple bidding system: you distribute 100 points over the different goods, and these weights de.ne your additive utility. The proof of the pudding is in the eating: thousands of visitors use these sites every month, fully aware that their bid is interpreted as their additive utility. Fairness as equal opportunities is achieved by the familiar Competitive Equilibrium with Equal Incomes. When dividing goods this rule is normatively compelling. Because it also maximizes the Nash product of utilities, it is unique utility-wise, continuous in the utility matrix, and easy to compute. It also guarantees that more manna to divide is never bad news for any participant (Resource Monotonicity), that by raising my bid on a certain good I cannot end up with a smaller share of that good (Responsive Shares), and that the size of my bids for the goods I do not eat is irrelevant (Independence of Lost Bids). The latter property is characteristic. When dividing bads, the Competitive Equilibria with Equal Incomes captures all the critical points of the Nash product of utilities, and is still characterized by Invariance of Lost Bids. It can be severely multi-valued: up to 2 Minn, p-1 distinct utility profiles with $n$ agents and $p$ goods. Moreover any single-valued efficient division rule attempting to implement equal opportunities faces two severe impossibility results: no such rule can be resource monotonic and guarantee the fair share; no such rule can be Envy-Free and continuous in the utility parameters. The fair division of bads is not a piece of cake.

## 17:00-18:00

## Collective Choice and Voting II

1. Emre Ergin (University of Maastricht), Burak Can (University of Maastricht)

Title: When are Minorities Strategically Negligible in Representative Democracies?
We analyze a voting game in which individuals vote by submitting a full ranking of alternatives, which is aggregated into a set of rankings. The outcome of this set valued social welfare rule is
interpreted as a set of delegates, representing individuals in, e.g., an international conference. We provide a class of rules that satisfy some reasonable axioms that is defined in variable population and alternatives framework. It turns out there critical thresholds where minorities are strategically negligible (or not) depending on their power.

## 2. Maurice Salles (University of Caen),

## Title: Social Choice and the Capability Approach

Social choice is concerned with the selection of an ideal (or social) option, which can be a so-called 'social state', or a social 'utility', or a social 'preference', or a social choice 'set'... on the basis of individual utilities, or individual utility functions, or individual preferences, or individual choice sets, or individual choice functions... A number of scholars have outlined the limited aspect of the notion of utility, among whom, notably and pre-eminently, Amartya Sen and Martha Nussbaum. Although they did not put it in such a strong phrase, the basic idea is to replace the notion of utility by the notion of capability (leaving aside 'happiness', a notion which for many is hardly distinguishable from utility). As has been remarked by Mozzafar Qizilbash, the development of the capability approach has been focused on the capability of an individual and, on the other hand, the idea of amalgamating or aggregating individual data is consubstantial with social choice. The purpose of this text is to propose some preliminary ideas regarding the aggregation of individual capabilities.

## Saturday, September 24

9:00-10:00

## Strategy-proofness and Implementation

1. Matias Nunez (University of Paris-Dauphine), Jean-François Laslier (Paris School of Economics), Carlos Pimienta (University of New South Wales )

## Title: Reaching Consensus Through Approval Bargaining

In the Approval Bargaining game, two players bargain over a finite set of alternatives. To this end, each one simultaneously submits a utility profile $u$ jointly with a real number ; by doing so she approves of the lotteries whose expected utility according to $u$ is at least . The lottery to be implemented is randomly selected among the most approved ones. We first show that there is an equilibrium such that players truthfully reveal their utility type. We also prove that, in any equilibrium, an agreement is reached in the sense that the outcome is approved by both players. Finally, every equilibrium is Pareto efficient and sincere as long as both players are endowed with a lexicographic preference for honesty.
2. Onur Dogan (Istanbul Bilgi University), Jean Lain (Conservatoire National des Arts et Mtiers, Paris, France, and Murat Sertel Center for Advanced Economic Studies, Istanbul Bilgi University)
Title: Strategic Manipulation of Social Welfare Functions via Strict Preference Extensions
This paper investigates the robustness of aggregation rules to strategic manipulation. An aggregation rule maps each profile of linear orders over finitely many alternatives to a social linear order over alternatives. Linear orders over alternatives are extended to preferences over orders, called hyperpreferences, defined as linear orders over orders. An individual manipulates an aggregation rule at some profile if misrepresenting ones preference p induces a social ordering that is preferred to the current one according to the hyper-preference generated by p . We provide a set of necessary and sufficient conditions on aggregation rules so that there exist hyper-preferences for which no individual
can manipulate the outcome. Moreover, we introduce a constraint for domains of hyper-preferences that allow for non-trivial and nonmanipulable aggregation rules. Later on, we shift our focus to hyperpreferences which satisfy the betweenness criterion: Given an order p over alternatives, an order q is ranked above another order q0 if the set of alternative pairs on which p agrees with q contains the set of pairs on which $p$ agrees with q0. We provide a complete study of strategy-proofness for pairwise unanimous and anonymous aggregation rules defined for 3 alternatives. Finally, we show that when there are at least 3 alternatives, pairwise unanimity, anonymity, reverse orders independence nd strategy-proofness are mutually incompatible.

## 10:00-11:00

## Networks

1. Federico Valenciano (University of the Basque Country), Norma Olaizola-Ortega (University of the Basque Country)

## Title: A 'Marginalist' Model of Network Formation

We provide a model of network-formation where the quality of a link, i.e. the fidelity-level of its transmission, depends on the amount invested in it and is determined by a link-formation "technology", an increasing strictly concave function which is the only exogenous ingredient in the model. The revenue from the investment in links is the information that the nodes receive through the network. Two approaches are considered. First, assuming that the investments in links are made by a planner, the basic question is that of the efficient structures, which are fully characterized, including coreperiphery hybrid star-complete networks of which the star and complete networks are extreme cases. Second, assuming that links are the result of investments of the node-players involved, according to such a technology

## 2. Fuad Aleskerov (National Research University Higher School of Economics and Institute of Control Sciences of Russian Academy of Sciences,Moscow, Russia),

## Title: Power in Network Structures

We consider an application of power indices which take into account preferences of agents for coalition formation proposed for an analysis of power distribution in elected bodies to reveal most powerful (central) nodes in networks. These indices take into account the parameters of the nodes in networks, a possibility of group influence from the subset of nodes to single nodes, and intensity of short and long interactions among the nodes. Some properties of the indices are discussed. Various applications are presented for the network of countries - migration, foreign claims, conflicts, etc.

11:30-12:30

## Ranking

1. Gabrielle Demange (cole Normale Suprieure , PSE) Title: Mutual Rankings
The enormous increase in interest in ranking methods based on data is evident in academic life, where students, researchers, universities are graded, or on Internet, where pages are ranked, movies and books are rated. Rankings may rely on a simple count by adding up the ratings, or on more sophisticated computations, as in the recursive methods on which Google PageRank is based for example. A large number of situations involve two sides, each providing data on the other side. For example, buyers rate sellers and vice versa on eBay, students evaluate their professors and professors grade them. Different methods produce different results and arguments for and against each method
can be put forward. The objective of this paper is to analyze some ranking methods in these two-sided settings through their axiomatization.
2. Nicolas Gravel (University of Aix-Marseille, CNRS, EHESS), Brice Magdalou (University of Montpellier 1, LAMETA), Patrick Moyes (CNRS, GRETHA, Universit Montesquieu)

## Title: Ranking Distributions of an Ordinal Attribute

This paper establishes foundational equivalences between alternative criteria for comparing distributions of an ordinally measurable attribute. A first criterion is associated with the possibility of going from distribution to the other by a finite sequence of two elementary operations: increments of the attribute and Hammond transfers. The later transfers are like the famous Pigou-Dalton ones, but without the requirement - that would be senseless in an ordinal setting - that the "amount" transferred from the "rich" to the "poor" is fixed. A second criterion is a new easy-to-use statistical criterion associated to a specifically weighted recursion on the cumulative density of the distribution function. A third criterion is that resulting from the comparison of numerical values assigned to distributions by a large class of additively separable social evaluation functions. Dual versions of these criteria are also considered and alternative equivalence results are established. Illustrations of the criteria are also provided.

## 14:00-15:30

## Games and Bargaining II

## 1. William Thomson (University of Rochester)

## Title: Equal Area Rule to Adjudicate Conflicting Claims

We consider the problem of adjudicating conflicting claims that agents may have over a resource (O'Neill, 1983). By mapping such a problem into a bargaining problem à la Nash, we avail ourselves of the solution concepts developed in bargaining theory. We focus on the solution to two-player bargaining problems known as the "equal area solution". We study the properties of the induced rule to solve claims problems. Next, we show that there is no consistent way of generalizing it from two claimants to more than two claimants. We propose a way out of this impossibility by turning to a weaker consistency notion, and invoking a result concerning the general existence of extensions satisfying this notion (Dagan and Volij, 1997). We study the property of the resulting rule.
2. Alain Trannoy (University of Aix-Marseille), Edouard Husson (University of Amiens and Paris-Sciences and Lettres (PSL))
Title: Was Raymond Poincar (The President of the French Republic in July 1914) a Game Player or a Gambler?
As noticed by John Keegan The peremptory transition from an apparently profound peace to a violent general war in a few mid-summer weeks in 1914 continue to defy attempts at explanation. We focus on July 14 and we attempt at a game-theory explanation of the switch from general peace to war among all the major European powers except Italy. We will even restrict our analysis furthermore to the very last days of July 14, when it was clear that Russia and Austria would fight each other and Germany was on the brink of war. At that point, the attitude of France was crucial. To tell of France at this given period is to speak of President Raymond Poincare whose cousin became one of the most famous mathematicians of the 20th century. Although the presidents of the third French republic had less power than the prime ministers, Poincare managed to circumvent the Prime Minister and the minister of foreign affairs of that time on that peace/war issue. We try to understand why Poincare did not withdraw by trying to appeal to Great Britain for a general peace conference involving all the main European powers. Our main message is that it was as if France and Germany silently
coordinated to fight each other, France confident in the most massive coalition that it could dream about, Germany proud of the superiority of its army. Both were right and exhausted Europe. Of course, Poincare was not the last to put the blame on Germany at the Versailles conference after WW1.
3. Saptarshi Mukherjee (Indian Institute of Technology Delhi), Nozomu Muto (Yokohama National University)
Title: Implementation in Undominated Strategies with Partially Honest Agents
We consider implementation in undominated strategies by bounded mechanisms. We provide a complete characterization of the class of social choice correspondences that are implementable when agents are partially honest, in the sense that they have strict preferences for being sincere when truthfulness does not result in a worse outcome. As an application, we show that the Pareto correspondence is implemented by a finite mechanism

## 16:00-17:30

## Labour and Education

1. Fatma Aslan (Istanbul Bilgi University), Jean Lain (LIRSA, Conservatoire National des Arts et Mtiers, Murat Sertel Center for Advanced Economic Studies)

## Title: Designing Job Mobility of Couples when Distance Matters

We formalize job mobility procedure through a generalized Shapley-Scarf model of markets for finitely many pure indivisible goods without money, where individuals may be married and couples simultaneously apply for jobs. Moreover, we endow the set of jobs with a geographical structure in order to capture the fact that couples wish to live together. Married individuals valuate allocations taking into account both the satisfaction they get from their job and the distance to their mate. Two alternative concepts of Core stability are defined according to whether it allows for matchings that are individually rational. We show that Core existence strongly rests upon the precise way marriedindividuals valuate matchings, as well as the properties of the initial matching and the location structure.
2. Mehmet Barlo (Sabanc Universitesi), O. Faruk Koru (Sabanc University)

Title: Spillovers between Skilled and Low Skilled Labor Migration in a Multi-Regional Setting
We analyze spillover effects between movements of skilled and low skilled labor in a static multiregional model featuring three factors of production: capital, labor, and land. While capital is perfectly mobile and land immobile, labor from one region can migrate to another with some origindestination specific probability (induced by the associated immigration policies) after incurring a skill specific efficiency loss also determined by the origin and destination. In this setting, we characterize not only competitive equilibrium allocations of factors of production but also the associated migration levels. Furthermore, we show that policies of host regions favoring skilled labor from one particular region may trigger movements of low skilled labor from other regions even when all the other parameters, including those concerning low skilled labor movements, remain the same.
3. Ahmet Alkan (Sabanci University), Sinan Sarpça (Koc University)

Title: Does School Matter? Value-Added at Highly Selective Schools
What value-added does a school have on the future academic achievements of its students? In particular, does going to school with higher-achieving peers help students in subsequent academic
achievement? Somewhat more generally, does going to a more preferred school help students in subsequent academic achievement? Using data pertaining to the elite public exam schools in the centrally administered Turkish system and a regression discontinuity design, we document that otherwise similar students who get placed in high schools with different levels of peer quality or desirability do not differ in their performance in the high-stakes university entrance exam or the resulting placement.

## 17:30-18:30

## Collective Choice and Voting III

1. Vincent Merlin (University of Caen), Eric Kamwa, ( Normandie University ), Faty Top (CNRS) Title: Abstention and Referendum Paradoxes for Scoring Run-off Rules on the Singlepeaked Domain
It is well known in social choice literature than all the scoring run-off rules (e.g. the Hare Rule, the Nanson Rule, Single Transferable Voting, 2 Round Plurality rule) suffer from the abstention paradox. That is, for some particular preference profiles, a voter or a group of voters may be better off by abstaining than by participating to the election. Hence, the so called participation condition is not satisfied. This paradox has been described by Brams and Fishburn (1983) and Smith (1973). Moulin (1988) also proved that all the Condorcet voting rules suffer from this paradox. Lepelley and Merlin (2001) evaluated the probability of the abstention paradox in three candidate case for scoring run-off rules under the Impartial Culture (IC) and Impartial Anonymous Culture (IAC) assumptions. In this paper, we revisit these results on the domain of single peaked preferences. First, we show, that, in the three candidate case, all the run-off rules characterized by the scoring vector $\mathrm{v}=(1, \mathrm{~s}, 0)$, with $s$ in $[1 / 2 ; 1]$ are immune to the paradox. In the for candidate case, we show that 2 round antiplurality is still immune to the paradox, while this no longer the case for 2 round Borda rule. We also evaluate the likelihood of the abstention and participation paradoxes for 2 round plurality under the IAC assumption. Though the likelihood of the paradoxes is roughly divided by 2 when we restrict ourselves to the single peaked domain in the three candidate case, it significantly rises as soon as we consider the four candidate case. Hence, we cannot say that considering the single peaked domain is a good way to avoid the abstention and the participation paradoxes for 2 round plurality, a voting method that is used for the election of the president and deputies in many countries (e.g. France, Senegal, etc.)
2. Annick Laruelle (University of Basque Country and Ikerbasque), Jos Carlos R. Alcantud (BORDA Research Unit and Multidisciplinary Institute of Enterprise (IME), Salamanca University)

## Title: To Disqualify or Not to Qualify: This is the Other Question

In this paper we consider collective identity rules that address the question of "who is a J.?" In most identity rules the possible answer only consists of two levels: 1 (qualification) and 0 (non qualification). However non qualification may mean "disqualifcation" or just indifference or even absence of sufficient knowledge for evaluating the candidate. In this paper we study rules that allow for a third level of qualification. The three levels have the following interpretation: 1 means qualification, -1 means disqualification and 0 means unqualification.

