

November, 19th, 2021. On-line meeting.

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Institutions



Organizing Committee

- Francisco Alvarez (Universidad Complutense Madrid).
- Elena Molis (Universidad de Granada).
- Bernardo Moreno (Universidad de Málaga).

Program

Session 1. 9:30-11:00.

Chair: Francisco Alvarez (Universidad Complutense Madrid)

9:30-10:00

Revisiting topology in social choice.

Armajac Raventós Pujol (Universidad Pública de Navarra)

10:00-10:30

Running alone and not finishing second: the effect of plebiscites on autocratic survival.

Sergio Velasco Monje (Universidad de Valladolid)

10:30-11:00

Clustering the EU: finding similarities through euroscepticism.

Sergi Urzay (Universitat de Girona)

11:00-11:30 Coffee break

Invited Speakers. 11:30-13:30.

Chair: Bernardo Moreno (Universidad de Málaga)

11:30-12:30 *Implementation in undominated strategies with applications to auction design, public good provision and matching.*
Arunava Sen (Indian Statistical Institute)

12:30-13:30 *Fostering collaborations in matching platforms.*
Antonio Nicoló (University of Padua)

13:30-15:00 Lunch

Session 2. 15:00-16:30.

Chair: Elena Molis (Universidad de Granada)

15:00-15:30 *Coordination effects among global games: an application on tax havens.*
Joan Margalef (Universidad Autónoma de Barcelona)

15:30-16:00 *Criticality orders in flow situations.*
Teresa Estañ Pereña (Universidad Miguel Hernández)

16:00-16:30 *Voting equilibria and public funding of political parties.*
Guadalupe Correa Lopera (European University Institute)

16:30-17:00 Coffee break

Session 3. 17:00-18:30.

Chair: Jordi Massó (Universidad Autónoma de Barcelona)

17:00-17:30 *The effect of reputation on electoral promises.*
Manuel LLeonart (Universidad Autónoma de Barcelona)

17:30-18:00 *Stable sharing.*
Pietro Salmaso (Universidad de Málaga)

18:00-18:30 *Trading venues over network linkages: market structure and strategic behavior.*
Gabriela Stockler (Universidad Autónoma de Barcelona)

Abstracts (ordered by presentation time)

9:30

Revisiting topology in social choice.

Armajac Raventós Pujol (Universidad Pública de Navarra)

Arrow's Impossibility Theorem has received many different types of proofs since Arrow proved it for the first time. One of these innovative proofs was proposed by Baryshnikov [2] using an advanced Algebraic Topological framework. Baryshnikov and other authors as Lauwers [3] or Baigent [1] thought that this framework was helpful to solve the problem of domain restriction on the Arrovian model, but there are only a few advances in this direction. In this work, we have obtained a new proof of the Impossibility Theorem on the same topological framework but using techniques from Combinatorial Topology. In particular, we use the Degree's Lemma, much more straightforward than Baryshnikov's advanced machinery (which is based on Homological Algebra). In the talk, we will expose the topological framework of the Arrovian model as well as the intuition behind our proof. We will finish exploring how Combinatorial Topology could solve restriction domain problems and other problems in Social Choice.

10:00

Running alone and not finishing second: the effect of plebiscites on autocratic survival.

Sergio Velasco Monje (Universidad de Valladolid)

There are several reasons why an autocrat might use a plebiscite. These include the ability to put the will of the people on the autocrat's shoulders, the ability to repress whole sections of the population, or to gauge the level of popularity of his regime. But a key question still unanswered is whether the use of this instrument actually promotes the survival of the regime or, on the contrary, is merely an ornamental ceremony. Through empirical methods we show that plebiscites help autocratic regimes survive longer, while mitigating mass mobilisation and internal regime breakdown through coups.

10:30

Clustering the EU: finding similarities through euroscepticism

Sergi Urzay (Universitat de Girona)

Criticism of the European Union spreads all over the country members. In fact, the European Commission measures and controls it through the Eurobarometer, a public opinion survey conducted regularly since 1973. Although Euroscepticism has been studied from the point of view of politicians and what they advocate about the future of their country outside the European Union, other scholars prefer to study the feelings of European citizens regarding their relationship with the European Union. Our study has been carried out using a Eurosceptic variable represented as a time series. As cluster analysis offers a wide variety of methods and techniques, we present a double approach: clustering a time series and a static approach.

On the first one, we use the Calinski & Harabasz (1978) and the Philips & Sul (2007) method. When it comes to the static approach, we conduct a clusterization with k-means, which guides us to our solution. In addition, we conduct a linear regression for the extraction of 3 variables and their subsequent clustering: mean, as a magnitude of Euroscepticism; standard deviation, as volatility of opinion on this topic; and slope, as a Eurosceptic tendency of the country. The clusterization guides us to a 3-cluster-solution. Countries are set out in different groups according to their similarities in terms of our 3 main variables with 14, 5, and 9 members, each. Group 1, with countries like The Netherlands or Austria, is characterized for being the most volatile group, in terms of changing their opinion about their relationship with the EU, and the only group with an increasing tendency for being against the EU. Group 2, lead by the United Kingdom or Greece, is characterized for being the most Eurosceptic group and, at the same time, the group with the biggest anti-EU opinion decreasing tendency. At last, Group 3, with Spain or Germany, for example, is characterized for being the less Eurosceptic group.

11:30

Implementation in undominated strategies with applications to auction design, public good provision and matching.

Arunava Sen (Indian Statistical Institute)

This paper considers implementation in undominated strategies by finite mechanisms, where multiple outcomes may be implemented in a single state of the world. We establish a sufficient condition for implementation applicable in a general environment with private values. We apply it to three well-known environments and obtain strikingly permissive results. In the single-object auction, the second-price auction with a reserve price can be outperformed in terms of revenue. In the public good provision problem, the Vickrey–Clarke–Groves mechanism can be outperformed from the viewpoint of a designer who wishes to minimise deficit subject to efficiency. In the two-sided matching environment where preferences on one side of the market are private information, the social choice correspondence that outputs all stable matchings at every preference profile, is implementable.

12:30

Fostering collaborations in matching platforms.

Antonio Nicoló (University of Padua)

We study a centralized mechanism to foster collaborations in a matching platform among a set of agents who have to work on a set of projects. Agents can be matched in pairs to develop a project or leave the platform unmatched. A pair of agents either have complementary skills (and thus can form a compatible partnership) or are non-compatible. For every compatible partnership, there is a set (possibly empty) of projects that partners agree on as being “first choice” projects. We propose a mechanism, the Object Constrained Maximal Matching Algorithm (OCMMA), that generates a Pareto-efficient assignment in the weak core and is group strategy-proof. The social choice function generated by OCMMA is uniquely characterized by four axioms: Pareto-efficiency, the weak core property, Restricted Maskin Monotonicity and invariance with respect to deleted links. The last two axioms are invariance properties with respect to specific preference changes.

15:00

Coordination effects among global games: an application on tax havens.

Joan Margalef (Universidad Autónoma de Barcelona)

Regime change global games are coordination games with incomplete information in which an entity's regime changes if a sufficiently large number of agents take a certain action. This paper extends the game to multiple entities to account for the possible coordination effects among them. To analyze this, I design a model where multiple regime change global games take place simultaneously, and in an ex-ante stage, agents decide which one they play. Then, I compare the effects of altering the public information on the overall coordination. The whole model is conducted using a tax evasion application. My results show that worsening the public information of just one tax haven can increase (ease) or decrease (hinder) evasion (coordination), depending on the relative perception of each one. When the tax haven with the best public perception for evading is threatened, it leads to less evasion. However, if the tax haven with the worst public perception is threatened too harshly, it leads to more evasion due to a Crowding-in effect. Whereas a symmetric worsening always hinders coordination. Therefore, modeling a single entity global game when, in fact, players could choose among several of them, might be missing notorious coordination effects. Indeed, these effects can explain the inefficacy of the international policies to undermine tax evasion. Yet, the oncoming Minimum Global Tax Rate will reduce evasion.

15:30

Criticality orders in flow situations.

Teresa Estañ Pereña (Universidad Miguel Hernández)

In this work we define several simple games related to the network flow problems. In particular, we are focused on the Path problem, that is the problem of sending a flow from the source to the sink, independent of the flow value or other concepts, e.g. the minimum path. We are interested in analyzing the relevance of the players (arcs) of the game. To do that, we study the path problem from the point of view of criticality orders. To give a solution to this situation, we present two different approaches: Quantitative (by computing two power index) and qualitative (by ranking the players).

16:00

Voting equilibria and public funding of political parties.

Guadalupe Correa Lopera (European University Institute)

In most OECD countries direct public funding to political parties is provided. The allocation of state support to political parties in these countries is mainly executed based on two principles, i.e., (i) in proportion to the votes obtained by each party in the national legislative elections (or alternatively the number of seats obtained in parliament), and (ii) some amount of money is distributed evenly to all parties. In this paper, we consider the existence of an optimal policy and study the design of the public funding of political parties guaranteeing its implementation, in a setting where the public funding allocation rule is a linear

function of the received number of votes. Our findings point in two main directions. First, we find that direct public funding to political parties has to be necessarily provided when implementing the optimal policy is the goal. Second, sums to be allocated both proportionally and evenly between parties depend on the beliefs of political parties about the accuracy of voters' information and the distribution of swing voters.

17:00

The effect of reputation on electoral promises.

Manuel LLeonart (Universidad Autónoma de Barcelona)

In this paper, I study how reputation affects candidates' decisions about their promises in electoral campaigns and the policies implemented. I develop a two-period model of election cycles where politicians must declare an electoral promise and, if elected, must decide whether to carry it out or to deviate. I show that, in equilibrium, candidates prefer to promise what the median voter wants. If they are impatient, they choose their preferred policy ignoring their promises. On the other hand, patient candidates prefer to keep their promises deviating only in the last period due to the punishment of voters. In the second part of the paper, I add a hypothesis of a randomly placed median voter. Here, I study the effect of imperfect information on political promises. In this context, the original model works as a benchmark to understand how the polarization of society and uncertainty affect the optimal strategies.

17:30

Stable sharing.

Pietro Salmaso (Universidad de Málaga)

We propose a simple model in which agents are matched in pairs in order to complete a task of unit size. The preferences of agents are single-peaked and continuous on the amount of time they devote to it. Our model combines features of two models: assignment games (Shapley and Shubik (1971)) and the division problem (Sprumont (1991)). We provide an algorithm (Select-Allocate-Match) that generates a stable and Pareto efficient allocation. We show that stable allocations may fail to exist if either the single-peakedness or the continuity assumption fail.

18:00

Trading venues over network linkages: market structure and strategic behavior.

Gabriela Stockler (Universidad Autónoma de Barcelona)

Abstract.
