Mariia "Masha" Titova

ECONOMICS DEPARTMENT
UNIVERSITY OF CALIFORNIA, SAN DIEGO
LINK TO MOST RECENT VERSION

Placement Director	Joel Sobel	jsobel@ucsd.edu
Placement Coordinator	Jessica Williams	jjwillia@ucsd.edu

CONTACT INFORMATION

Department of Economics
University of California, San Diego
9500 Gilman Drive
La Jolla, CA 92093-0508

Cell: (858)257-9065
Email: mtitova@ucsd.edu
Website: maria-titova.com

EDUCATION

Ph.D. Candidate in Economics — 2021 (*est.*)
University of California, San Diego — La Jolla, CA

- Committee: Renee Bowen (co-chair), Joel Sobel (co-chair), Simone Galperti, Joel Watson, Sebastian Saiegh (dept. of Political Science)

M.Sc. in Financial Economics — 2015
B.Sc. in Applied Mathematics and Information Science — 2013
National Research University – Higher School of Economics — Moscow, Russia

REFERENCES

Renee Bowen	UC San Diego	r0bowen@ucsd.edu
Joel Sobel	UC San Diego	jsobel@ucsd.edu
Simone Galperti	UC San Diego	sgalperti@ucsd.edu
Melissa Famulari (teaching reference)	UC San Diego	mfamulari@ucsd.edu

FIELDS OF INTEREST

Microeconomic Theory, Information Economics, Political Economy, Consumer Search

JOB MARKET PAPER

"Election Games with Verifiable Information" — August 2020

This paper studies environments in which a privately-informed sender (e.g. a politician, a prosecutor, a job market candidate) attempts to convince a group of uninformed receivers (voters, jury, committee members) to undertake her preferred action (vote in her favor, convict a defendant, offer a job). I focus on communication games with verifiable information, meaning that the sender cannot make false statements, but can lie by omission. I show that the outcome in the sender-preferred equilibrium coincides with the outcome of the Bayesian Persuasion game, suggesting that the sender may not benefit from having ex-ante commitment power. In the sender-worst equilibrium, information unravels, and the sender communicates

all of her private information and the receivers make a fully-informed choice. To prove these results, I show that one can restrict attention to a simple class of direct equilibria, in which the sender tells each receiver what to do, and the receivers obediently follow their recommendations. In the leading application, I compare public disclosure to targeted advertising in a spatial model of voting and show that targeting may be an instrument of swinging elections that are unwinnable otherwise, but only by the candidates whose policies are sufficiently close to the status quo.

RESEARCH IN PROGRESS

"Collaborative Search for a Public Good" November 2019

How efficient is search among risky alternatives, performed by a group of people, when both the implemented project, as well as all the information gathered during the learning process, are public goods? This paper presents a sequential search model for a risky alternative in which team members take turns to exert the search effort and learn the outcome of a project and use the unanimity rule to decide when to stop the learning process and terminate the game, implementing the best project uncovered so far. I show that the optimal search and stopping protocol on the equilibrium path is essentially indistinguishable from that of a social planner, in that the same project is implemented based on the same information gathered in the same order. At the same time, due to free-riding, search in teams does lead to a delay at each stage of the learning process, the size of which grows with search costs. Consequently, the team manager prefers to delegate search to an individual agent, while every agent prefers searching with a partner, since in the latter case she collects the same reward, but only pays the search cost half the time.

"Targeted Advertising in Elections" October 2019

Can targeted advertising swing elections? This paper examines a communication model between a political candidate who challenges the status quo, privately knows his position on relevant socio-economic issues, and advertises his position to sincere voters by sending public or private verifiable messages. I show that the challenger can win an election by sending a public message if and only if a majority of voters agrees on at least one issue. In polarized societies, in which voters disagree on all issues, public disclosure is never effective, but targeted advertising almost always is. The value of the targeting technology grows as the population of voters becomes more polarized, but is limited in that only challengers whose positions are moderately close to the status quo can benefit from it and swing elections that are unwinnable under public disclosure.

Published Papers

"Shopping Malls, Platforms and Consumer Search" with Alexei Parakhonyak 2018
International Journal of Industrial Organization, vol. 58, 2018, pp. 183–213

We consider a model of a market for differentiated goods in which firms are located in marketplaces e.g., shopping malls or platforms. There are search frictions between marketplaces, but not within. Marketplaces differ in size. We show that an equilibrium in which consumers start their search at the largest marketplace and continue in the descending order of size, always exists. Despite charging lower prices, firms in larger marketplaces earn higher profits. Under free entry, all firms cluster in one marketplace provided that search frictions are large enough. If a marketplace determines the price of entry, then the equilibrium marketplace size is a single-peaked function of search costs and is decreasing for most of the search cost range.

RELEVANT POSITIONS HELD

University of California, San Diego — La Jolla, CA
Research Assistant to James Andreoni, Renee Bowen, Joel Sobel, Charles Sprenger — 2016 – present

National Research University – Higher School of Economics — Moscow, Russia
Research Assistant to Alexei Parakhonyak and Maarten Janssen — 2013 – 2015

TEACHING EXPERIENCE

University of California, San Diego — La Jolla, CA
Instructor — Summer 2020

- Econ 1 (Introductory Microeconomics)

Teaching Assistant — 2016 – present

- Econ 1 (Introductory Microeconomics), Econ 100ABC (Microeconomics), Econ 171 (Decisions Under Uncertainty), Econ 172B (Operations Research), Econ 176 (Marketing)

National Research University – Higher School of Economics — Moscow, Russia
Instructor — 2014 –2015

- Game Theory (Graduate, dept. of Political Science)

Teaching Assistant — 2011 – 2015

- Game Theory, Development Economics (University of London External Programme)
- Real Analysis, Game Theory, Differential Equations (dept. of Computer Science)

ACADEMIC SERVICE

2019 Organizer, the UCSD Economic Theory Reading Group

PRESENTATIONS

2019 Young Economists Symposium (Columbia University), Economics Graduate Student Conference (Washington University in St. Louis), UCSD Theory Lunch

2018 Southwest Economic Theory Conference (UC Santa Barbara), UCSD Theory Lunch

2017 Psychological Game Theory Ph.D. Summer School (Norwich, UK), UCSD Theory Lunch

REFEREE SERVICE

2019 *Economic Theory*

Fellowships and Awards

Summer Graduate Teaching Scholar	2020
UC San Diego Economics Department Candidate of Philosophy Fellowship	2019
UC San Diego International Travel Grant	2017, 2019
UC San Diego Graduate Summer Research Fellowship	2016, 2017
UC San Diego Regents Fellowship	2015 – 2018

OTHER INFORMATION

Languages:	fluent English, native Russian
Programming:	proficient in Python and MATLAB
Certifications:	CFA Level I (December 2012)
Citizenship:	Russia (F-1 visa)