

The Seventh International Conference
Game Theory and Management

26-28 June, 2013
St. Petersburg, Russia

Organized by
St. Petersburg University
Graduate School of Management,
Faculty of Applied Mathematics & Control Processes
and
The International Society of Dynamic Games
(Russian Chapter)

The Conference is being held at
Graduate School of Management, St. Petersburg University
Volkhovskiy per., 3, St. Petersburg, Russia

Sponsored by
Graduate School of Management
and
Faculty of Applied Mathematics & Control Processes
St. Petersburg University

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Program

Graduate School of Management, St. Petersburg University
Volkhovsky per., 3, St. Petersburg, Russia

Wednesday, June 26		
08:45 – 09:30	REGISTRATION	3 rd floor
08:45 – 09:30	COFFEE	Room 307
09:30 – 09:50	WELCOME ADDRESS	Room 309
09:50 – 10:55	PLENARY TALK (1)	Room 309
11:00 – 12:00	PLENARY TALK (2)	Room 309
12:00 – 14:00	LUNCH	University Center
14:00 – 16:30	PARALLEL SESSIONS (W1)	Room 309, 311
16:30 – 16:50	COFFEE BREAK	Room 307
16:50 – 19:00	PARALLEL SESSIONS (W2)	Room 309, 311
19:00 – 22:00	WELCOME PARTY	Room 403
Thursday, June 27		
09:30 – 10:00	COFFEE	Room 307
10:00 – 11:00	PLENARY TALK (3)	Room 309
11:10 – 12:10	PARALLEL SESSIONS (T1)	Room 309,
12:10 – 14:00	LUNCH	University Center
14:00 – 16:30	PARALLEL SESSIONS (T2)	Room 309, 311, 315
16:30 – 16:50	COFFEE BREAK	Room 307
16:50 – 19:00	PARALLEL SESSIONS (T3)	Room 309, 311
Friday, June 28		
09:30 – 10:00	COFFEE	Room 307
10:00 – 11:00	PLENARY TALK (4)	Room 309
11:10 – 12:20	PARALLEL SESSIONS (F1)	Room 309, 311, 315
12:10 – 14:00	LUNCH	University Center
14:00 – 16:30	PARALLEL SESSIONS (F2)	Room 309, 311
16:30 – 17:00	COFFEE BREAK	Room 307
17:00 – 17:30	CLOSING SESSION	Room 309
19:00 – 22:00	CONFERENCE BANQUET	Restaurant “Yunost”

Wednesday, June 26

09:45 – 10:55 **PLENARY 1. GRAND HALL, room 309**

Chair – Leon Petrosyan

Finn Kydland, University of California, Santa Barbara (USA)

On dynamic games

11:00 – 12:00 **PLENARY 2. GRAND HALL, room 309**

Chair – Nikolay Zenkevich

Leon Petrosyan, St. Petersburg University (Russia)

Time-consistent and strategically supported cooperation in dynamic games

12:00 – 14:00 LUNCH¹

14:00 – 16:30 **W1: PARALLEL SESSIONS**

OCA: room 309

Oligopoly, Competition and Allocation

Chair – Igor Bykadorov

14:00 – 14:25 **Mikhail Iskakov** and **Alexey Iskakov**

Equilibrium in secure strategies in the Bertrand-Edgeworth duopoly model

14:25 – 14:50 **Andrea Mantovani**, Carlo Reggiani and Emilie Dargaud

The fight against cartels: a transatlantic perspective

14:50 – 15:15 **Sergey Kichko**, Sergey Kokovin and Evgeny Zhelobodko

Two-factor model of monopolistic competition and market integration

15:15 – 15:40 **Sergey Kokovin**, Maxim Goryunov and Evgeny Zhelobodko

The game-theoretical model of the service choice with big losses

¹ Lunch will be held at the University Center's restaurant, Birzhevaya liniya, 6

15:40 – 16:05 **Alexander Sidorov**
Mechanisms of endogenous allocation of firms and workers in urban area: from monocentric to polycentric city

16:05 – 16:30 **Igor Bykadorov, Sergey Kokovin and Evgeny Zhelobodko**
Investments in R&D under trade liberalization: monopolistic competition model

GGN: room 311
Cooperation, Bargaining and Networks
Chair – Anna Khmelnitskaya

14:00 – 14:25 **Anna Shchiptsova**
Airline networks under price competition

14:25 – 14:50 **Tatiana Abramovskaya**
One guaranteed search problem on trees

14:50 – 15:15 **Jia-Ping Huang, Maurice Koster and Ines Lindner**
Communication and coordination in social networks: action as communication device

15:15 – 15:40 **Anna Khmelnitskaya, Ozer Selcuk and Dolf Talman**
The Shapley value for TU games with oriented graph cooperation structures

15:40 – 16:05 **Andrey Lyapunov**
Game-theoretic solutions for bargaining problem

16:05 – 16:30 **Xeniya Grigorieva and Pauline Shaikina**
Multicriteria coalitional model of decision-making over the set of projects with constant matrix of payoffs in the noncooperative game

16:30 – 16:50 COFFEE BREAK, room 307

16:50 – 19:00 **W2: PARALLEL SESSIONS**

CGA-1: room 309
Cooperative Games and Applications - 1
Chair – Elena Yanovskaya

16:50 – 17:15 **Elena Yanovskaya**
The bounded core for games with restricted cooperation

17:15 – 17:40 **Valery Vasilev**
A fuzzy-core extension of Scarf theorem

17:40 – 18:05 **Natalia Naumova**

An axiomatization of the proportional prenucleolus

18:05 – 18:30 **Radim Valencik, Ondrej Cernik** and Petr Wawrosz

NM-modified generalized Raiffa solution and its application

18:30 – 18:55 **Osman Palanci, S. Zeynep Alparslan Gok** and
Gerhard Wilhelm Weber

Cooperative interval games: forest situations with interval data

RCS: room 311

Repetition, Bidding and Stability

Chair – Andrea Canidio

16:50 – 17:15 **Georgii Aleksandrov** and Nikolay Zenkevich

Dynamic stability of strategic alliances

17:15 – 17:40 **Fedor Sandomirskii**

Repeated games with incomplete information and slowly growing value

17:40 – 18:05 **Marina Sandomirskaia**

On the bidding with asymmetric information and the finite number of repetition

18:05 – 18:30 **Ovanes Petrosian**

Optimal entering of newcomer in the voting game

18:30 – 18:55 **Andrea Canidio** and Thomas Gall

Rewarding idleness

19:00 – 22:00 WELCOME PARTY²

Thursday, June 27

10:00 – 11:00 **PLENARY 3. GRAND HALL, room 309**

Chair – Vladimir Mazalov

Burkhard Monien, Paderborn University (Germany)

The complexity of computing equilibria

11:10 – 12:10 **T1: PARALLEL SESSIONS**

² Welcome party will be held at the room 403, 4th floor

GTMA-1: room 309

Game Theory and Management Applications - 1

Chair – Luis Corchon

11:10-11:30 **Joseph Mullett**

How to arrange a singles' party: coalition formation in matching game

11:30-11:50 **Luis Corchon**

Dynamic contents with bankruptcy

11:50-12:10 **Maria Nastych** and **Nikolai Balashov**

Evolution of agent's behavior in the labor market

CGA-2: room 311

Cooperative Games and Applications - 2

Chair – Ilya Katsev

11:05 – 11:30 **Ilya Katsev**, Rene van Den Brink and Gerard van der Laan

The axiomatization of the prenucleolus for some classes of veto-balanced games

11:30 – 11:55 **Gabriel Turbay**

Most dominant imputations

11:55 – 12:20 **Eulalia Romero**, Jose Manuel Zarzuelo and Miguel Ángel Hinojosa

Consistency of the Shapley NTU value

12:20 – 14:00 LUNCH

14:00 – 16:30 **T2: PARALLEL SESSIONS**

GTMA-2: room 309

Game Theory and Management Applications - 2

Chair – Denis Kuzyutin

14:00 – 14:25 **Artem Sedakov** and **Elena Parilina**

Stable cooperation with communication structure

14:25 – 14:50 **Gabriel Turbay** and Guillermo Owen

On equilibrium based coalition formation likelihood

14:50 – 15:15 Wenna Wang, **Genjiu Xu** and Hao Sun

Axiomatization of two dual values with associated consistency

15:15 – 15:40 Hua Dong, Hao Sun and **Genjiu Xu**

A matrix approach to an efficient Myerson value on union stable structures

15:40 – 16:05 **Victor Rozen**
Completions for space of preferences

16:05 – 16:30 **Nadezhda Smirnova**, Svetlana Tarashnina and **Denis Kuzyutin**
The set of alpha-prenucleoli in a 3-person cooperative TU-game

DGA: room 311
Dynamic Games and Applications - 1
Chair – Sergey Kumkov

14:00 – 14:25 Olga Gorbaneva and **Guennady Ougolnitsky**
A problem of purpose resource use in the two-level control systems

14:25 – 14:50 **Mehdi Salimi**
Pursuit-evasion differential games with many players and integral constraints

14:50 – 15:15 **Igor Shevchenko**
Passing between two pursuers

15:15 – 15:40 **Sergey Kumkov** and Valerii Patsko
Optimal strategies in a differential game with two pursuers and one evader

15:40 – 16:05 **Anastasia Koroleva**
Time-consistency of strategic alliances: case study approach

16:05 – 16:30 David Yeung and **Leon Petrosyan**
A cooperative stochastic dynamic game of public goods provision

BAP: room 315
Bargaining, Arbitration and Power
Chair – Anna Rettieva

14:00 – 14:25 **Anna Rettieva**
Fish wars and Nash bargaining solution

14:25 – 14:50 **Julia Tokareva** and **Vladimir Mazalov**
Cake division model with non-symmetric parameters

14:50 – 15:15 **Alexander Mentcher**
On a discrete arbitration procedure with quadratic payoff function

15:15 – 15:40 **Anna Ivashko** and Elena Konovalchikova
Equilibria in two-sided mate choice problem with age preferences

15:40 – 16:05 **Onur Cobanli**
Central Asian gas in Eurasian Power Game

16:05 – 16:30 **Sergei Pechersky**
Note on disagreement point axioms and the status quo-proportional bargaining solution

16:30 – 16:50 COFFEE BREAK, room 307

16:50 – 19:00 **T3: PARALLEL SESSIONS**

GTMA-3: room 309

Game Theory and Management Applications - 3

Chair – Pierre Von Mouche

16:50 – 17:15 Victor Domansky and **Victoria Kreps**
Symmetric representations of bivariate distributions and bidding games

17:15 – 17:40 **Pierre Von Mouche**, Michael Finus and Bianca Rundshagen
On uniqueness of coalitional equilibria for Cournot-like games

17:40 – 18:05 Andrey Lukyanenko and **Vladimir Mazalov**
Equilibrium in cloud computing market

18:05 – 18:30 **Shiran Rachmilevitch**
Kalai-Smorodinsky-Nash robustness

18:30 – 18:55 **Vsevolod Korepanov**, Nikolay Korgin and Galina Boldyreva
Experiment with efficient Groves-Ledyard mechanism for resource allocation

CAAG: room 311

Cooperation, Allocations and Assignment Games

Chair – Marina Nunez

16:50 – 17:15 **Mikel Álvarez-Mozos**, Ziv Hellman and Eyal Winter
The spectrum value for coalitional games

17:15 – 17:40 **Francesc Llerena**, **Marina Nunez** and Carles Rafels
An axiomatization of the nucleolus of assignment games

17:40 – 18:05 **Josep M Izquierdo** and Carlos Rafels
Resource monotonic allocations and the core in joint investment problems

18:05 – 18:30 **Llerena Francesc, Marina Nunez** and Carlos Rafels
Consistency and the core of multi-sided assignment markets

18:30 – 18:55 **Miklos Pinter** and René van Den Brink
On axiomatizations of the Shapley value for assignment games

Friday, June 28

10:00 – 11:00 **PLENARY 4. GRAND HALL, room 309**
Chair – Victoria Kreps

Bernard De Meyer, Université Paris 1, Panthéon-Sorbonne (France)

Risk aversion and price dynamics on the stock market

11:10 – 12:10 **F1: PARALLEL SESSIONS**

SGB: room 309
Stochastic Games and Bargaining
Chair – Pavel Konyukhovskiy

11:10-11:30 **Pavel Konyukhovskiy** and **Alexandra Malova**
Application of stochastic cooperative games in the analysis of the interaction of economic agents

11:30-11:50 **Dmitrii Lozovanu** and Stefan Pickl
Determining the optimal strategies for stochastic positional games

11:50-12:10 **Aleksei Kondratev**
The relationship between discrete and continuous equilibria in bargaining model

ES: room 311
Evolution and Stability

Chair – Elena Gubar

11:10 – 11:30 **Tatiana Savina**
The strategies that dominate any evolutionary opponent in infinitely repeated games

11:30 – 11:50 **Elena Gubar** and Quanyan Zhu
Optimal control of SIR epidemic model with virus mutations

11:50 – 12:10 **Timofey Tokmantsev** and Evgeniy Krupennikov

On solution of the dynamic reconstructions for successful change management

DGA-2: room 315

Dynamic Games and Applications -2

Chair – Yuri Averboukh

11:10-11:30 **Yurii Averboukh**

Universal Nash equilibrium for n-player differential games

11:30-11:50 **Sergey Kostyunin**

On a utility function choice in the resource extraction games with random time horizon

11:50-12:10 **Abdukhakim Mamanazarov**

Game-theory applications in personal management

12:10 – 14:00 LUNCH

14:00 – 16:30 **F2: PARALLEL SESSIONS**

GTMA-4: room 309

Game Theory and Management Applications - 4

Chair – Michel Rudnianski

14:00 – 14:25 **Rodolfo Coelho Prates**

Power in Game theory

14:25 – 14:50 **Michel Rudnianski** and Cerasela Tanacescu

Unraveling conditions for successful change management

14:50 – 15:15 **Dominik Karos**

Bargaining in cooperative games

15:15 – 15:40 **Vasiliy Rodochenko** and Alexandra Zinchenko

Balancedness condition for semi-symmetric cooperative TU games

15:40 – 16:05 **Elena Gubar** and **Ekaterina Zhitkova**

Interaction between social groups in extended SIR model

16:05 – 16:30 **Michael Lutsenko** and **Natalija Shadrintseva**

Shapley value for a game with partially ordered set of players

NGA: room 311

Networking Games and Applications

Chair – Simone Runge

14:00 – 14:25 **Andrey Zyatchin**

Strong equilibria in the vehicle routing game

14:25 – 14:50 **Anna Sergeeva** and **Vladimir Bure**
Completely mixed equilibrium in the logistics market with asymmetrical clients

14:50 – 15:15 **Victor Zakharov** and **Alexander Krylatov**
Navigation strategies in transportation network

15:15 – 15:40 **Guenther Schuh** and **Simone Runge**
Applying game theory in procurement - an approach for coping with dynamic conditions in supply chains

15:40 – 16:05 **Lyudmila Trukhina**
Application of the Myerson value for the analysis of the academic sites

16:30 – 17:00 COFFEE BREAK, room 307

17:00 – 17:30 **CLOSING SESSION: GRAND HALL, room 309**
Chair – Leon Petrosyan

19:00 – 22:00 **CONFERENCE BANQUET³**

³Conference Banquet will be held at Restaurant “Yunost”; Petrovsky Island, 2

