

The Third International Conference
Game Theory and Management

24-26 June, 2009
St. Petersburg, Russia

Organized by
Graduate School of Management,
Faculty of Applied Mathematics and Control Processes
St. Petersburg University
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 State University
Volkhovskiy per., 3, St. Petersburg, Russia

Wednesday, June 24

08:45 – 09:30	REGISTRATION	3 rd floor
09:30 – 10:00	WELCOME ADDRESS	Room 309
10:00 – 11:00	PLENARY TALK (1)	Room 309
11:00 – 11:30	COFFEE BREAK	Room 307
11:30 – 12:30	PLENARY TALK (2)	Rooms 309
12:30 – 14:00	LUNCH	University Center
14:00 – 16:20	PARALLEL SESSIONS (W1)	Rooms 209, 211
16:20 – 16:40	COFFEE BREAK	Room 307
16:40 – 19:00	PARALLEL SESSIONS (W2)	Rooms 209, 211
19:00 – 22:00	WELCOME PARTY	School yard, 1 st floor

Thursday, June 25

09:30 – 10:00	COFFEE	3 rd floor
10:00 – 11:00	PLENARY TALK (3)	Room 309
11:10 – 12:20	PARALLEL SESSIONS (T1)	Rooms 209, 211
12:20 – 14:00	LUNCH	University Center
14:00 – 16:20	PARALLEL SESSIONS (T2)	Rooms 209, 211
16:20 – 16:50	COFFEE BREAK	Dining-hall, 1 st floor
16:50 – 18:10	PARALLEL SESSIONS (T3)	Rooms 209, 211

Friday, June 26

09:30 – 10:00	COFFEE	3 rd floor
10:00 – 11:00	PLENARY TALK (4)	Room 309
11:10 – 12:30	PARALLEL SESSIONS (F1)	Rooms 209, 211
12:30 – 14:00	LUNCH	University Center
14:00 – 16:20	PARALLEL SESSIONS (F2)	Rooms 209, 211
16:20 – 16:40	COFFEE BREAK	Room 307
16:40 – 17:40	SESSION (F3)	Room 309
17:50 – 18:20	CLOSING SESSION	Room 309
19:00 – 22:00	CONFERENCE BANQUET	Restaurant “Academia”

Wednesday, June 24

10:00 – 11:00 **PLENARY 1. GRAND HALL, room 309**

Chair – Leon Petrosyan

Pierre Bernhard

Nonzero-sum Dynamic Games in the Management of Biological Systems

11:00 – 11:30 COFFEE BREAK, room 307

11:30 – 12:30 **PLENARY 2. GRAND HALL, room 309**

Chair – Leon Petrosyan

Reinhard Selten

Incomplete Equilibrium

12:30 – 14:00 LUNCH, University Center, 2nd floor¹

14:00 – 16:20 **W1: PARALLEL SESSIONS**

GTM1: room 211

Game Theory and Management Applications

Chair – Jörn Rothe

14:00 – 14:20 Leon Petrosyan and **Artem Sedakov**
Multistage Game With Simple Coalitional Structure

14:20 – 14:40 **Tatiana Savina**
Mathematical models for games, based on preference relations

14:40 – 15:00 **Evgeny Ivashko**
Random priority zero-sum best choice game with disorder and imperfect observation

15:00 – 15:20 **Anna Falko**
Optimal strategies in the two-sided mate choice problem

15:20 – 15:40 **Encarnación Algaba**, Jesus Mario Bilbao and Manuel Ordoñez.
Solving some optimization problems on augmenting systems

15:40 – 16:00 **Jörn Rothe**

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

Uncertainty Aversion and Equilibrium in Normal Form Games

DGA1: room 209

Differential Games and Applications

Chair – Anatolii Kleimenov

14:00 – 14:20 **Andrey Zyatchin** and Nikolay Zenkevich
Strong Equilibrium in a Differential Game with Ito's Stochastic Dynamics

14:20 – 14:40 **Igor Shevchenko**
Guaranteed Strategies for Successive Pursuit with Finite Sensor Range

14:40 – 15:00 **Puduru Reddy** and Jacob Engwerda
Infinite Horizon Cooperative Differential Games - Necessary Conditions for Pareto Optimality

15:00 – 15:20 **Anatolii Kleimenov**
About Nash Solutions in Two-Person Positional Non-Antagonistic Differential Games

15:20 – 15:40 **Nina Subbotina** and Timofei Tokmantsev
The Method of Characteristics to Researches on a Macroeconomic Model

15:40 – 16:00 **Naima El Farouq** and Guy Barles
A Deterministic Impulse Control Problem with Nonstrictly Positive Impulse Cost Function

16:00 – 16:20 **Ekaterina Shevkoplyas**
Random Game Duration: Using Weibull Distribution

16:20 – 16:40 COFFEE BREAK, room 307

16:40 – 19:00 **W2: PARALLEL SESSIONS**

CGA1: room 209

Cooperative Games and Applications

Chair – Elena Yanovskaya

16:40 – 17:00 **Victor Rozen**
Cooperative games with ordered outcomes

17:00 – 17:20 **John Kleppe**, Javier Arin and Hans Reijnierse

The per capita nucleolus

17:20 – 17:40 **Elena Yanovskaya**

The nucleolus and the tau-value for interval games

17:40 – 18:00 **Sergei Pechersky**

On a Consistent Proportional Solution for NTU Games

18:00 – 18:20 **Edwin Lohmann** (S. Tijs, P. Borm, E. Lohmann and M. Quant)

An average lexicographic value for cooperative games

18:20 – 18:40 **Theo Driessen**, Vito Fragnelli, Ilya Katsev and Anna Khmelnitskaya

On one-convexity and nucleolus of co-insurance games

18:40 – 19:00 **Lev Oganyan**, Alexandra Zinchenko and Gennady Mermelshtejn

Core-Like Solution Concepts for Discrete Cooperative Games

GAF: room 211

Games and Applications to Finance

Chair – Gianfranco Gambarelli

16:40 – 17:00 **Klaas Schulze**

Risk Measures Respecting Comparative Risk Aversion

17:00 – 17:20 **Elena Gubar**

Comparison Different Types of Dynamics in an Evolutionary Model of Trades in the Stock Market

17:20 – 17:40 **Gianfranco Gambarelli**

Some results and open problems on the theory of power indices and its applications to finance

17:40 – 18:00 **Gennady Ougolnitsky**

Optimization and game theoretic modeling of the real estate development

18:00 – 18:20 José Alcalde, **Maria-del-Carmen Marco-Gil** and José A. Silva

A New Prospect of Additivity in Bankruptcy Problems

18:20 – 18:40 **Joseph Plasmans**, Tomasz Michalak and Jacob Engwerda

Strategic Interactions Between Fiscal and Monetary Authorities in a Multi-Country New-Keynesian Model of a Monetary

Thursday, June 25, 2009

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

Chair – Dmitry Novikov

Myrna Wooders

Games with many players as models of large economies

11:10 – 12:20 **T1: PARALLEL SESSIONS**

CGA2: room 209

Cooperative Games and Applications

Chair – Anna Khmelnitskaya

11:10-11:30 **Ilya Katsev**, Rene van den Brink and Gerard van der Laan

The Nucleolus of Disjunctive Games with a Permission Structure

11:30-11:50 **Natalia Naumova** and **Irina Korman**

Generalized kernels and bargaining sets for cooperative games with limited communication structure

11:50-12:10 **Anna Khmelnitskaya**

Values for graph-restricted games with coalition structure

AS: room 211

Auctions and Solutions

Chair – Ekaterina Shevkoplyas

11:10 – 11:30 Francoise Forges and **Omer Biran**

Core-stable bidding rings

11:30 – 11:50 **Omer Biran**

Strategic partial collusion in auctions with externalities

11:50 – 12:10 **Andrew Ivanov**

Buyer's auction in public procurement: break-through or mistake?

12:20 – 14:00 LUNCH, University Center, 2nd floor

14:00 – 16:20 **T2: PARALLEL SESSIONS**

ENR: room 211
Environment and Natural Resources
Chair – Victor Zakharov

14:00 – 14:20 **María Gómez-Rúa**
Sharing a polluted river through environmental taxes

14:20 – 14:40 **Anna Rettieva**
Fish Wars and Cooperation Maintenance

14:40 – 15:00 **Andrey Lukyanenko, Andrei Gurtov** and Vladimir Mazalov
Applying a reputation metric in a two-player resource sharing game

15:00 – 15:20 **Nadezhda Kozlovskaya**
Comparative Analysis of Optimal Solutions in the Differential Game of Emission Reduction

15:20 – 15:40 Matthew Fernandes, **Sergei Schreider** and Panlop Zeephongsekul
Application of Dynamic Game Theoretic Model with a Stochastic Objective Function for Natural Resource Management

15:40 – 16:00 Yulia Pavlova, Maria Dementieva and **Victor Zakharov**
Multistage Dynamics of International Environmental Agreements: Emission Reduction Scheme with Discounting

16:00 – 16:20 **Anna Iljina** and Nadezhda Kozlovskaya
D. W. K. Yeung's Condition for the Coalitional Solution of the Game of Pollution Cost Reduction

DGA2: room 209
Differential Games and Applications
Chair – Arsen Palestini

14:00 – 14:20 **Jesus Marin-Solano** and Ekaterina Shevkoplyas
Non-constant discounting in differential games with random duration

14:20 – 14:40 Luca Lambertini, Davide Dragone, George Leitmann and **Arsen Palestini**
Hamiltonian potential functions for differential games

14:40 – 15:00 **Leon Petrosyan, D. W. K. Yeung** and Vladimir Zhuk
The Detalization of the Irrational Behavior Proofness Condition

15:00 – 15:20 **Yaroslavna Pankratova** and Svetlana Tarashnina
The importance of cooperation in a group pursuit game between a pursuer and m evaders

15:20 – 15:40 **Ikram Iskanadjiev**
On duality of alternating integrals for quasi-linear differential games

15:40 – 16:00 **Anna Tur**
D. W. K. Yeung's Condition for Linear-Quadratic Discrete-time Dynamic Games

16:00 – 16:20 **Yurii Averboukh**
Feedback Nash Equilibrium and Constructions of Programmed Iteration Method

16:20 – 16:50 COFFEE BREAK, Dinning-hall, 1st floor²

16:50 – 18:10 **T3: PARALLEL SESSIONS**

GTM2: room 211
Game Theory and Management Applications
Chair – Victor Domansky

16:50 – 17:10 **Andrey Lyapunov**
Bargaining as multicriteria problem

17:10 – 17:30 **Nicholas Ziros**
The bargaining set in strategic market games

17:30 – 17:50 Victoria Kreps and **Victor Domansky**
Multistage biddings with several risky assets

17:50 – 18:10 **Victor Domansky**
Inspection Games: Dynkin games with zero payoffs for separate stopping

VQG: room 209
Voting and Quantum Games
Chair – Xavier Molinero

16:50 – 17:10 **Nikolay Korgin**
Feasibility problem for generalized median voter schemes

² See page 13, First floor Map

17:10 – 17:30 Andrei Grib and **Georgy Parfionov**
Quantum equilibrium and linear representations of ortholattices

17:30 – 17:50 **Xavier Molinero** and Josep Freixas
Measures of voting power: Counting of power indices and paradoxes

17:50 – 18:10 Josep Freixas and **Montserrat Pons**
Pre-orderings in Voting Simple Games

Friday June 26, 2009

10:00 – 11:00 **PLENARY 4. GRAND HALL, room 309**
Chair – Nikolay Zenkevich

Dmitry Novikov
Reflexive Games: Theory and Applications

11:10 – 12:30 **F1: PARALLEL SESSIONS**

GTM3: room 211
Game Theory and Management Applications
Chair – Vladimir Mazalov

11:10-11:30 **Alexander Galegov** and Andrey Garnaev
Competitive production models with tax

11:30-11:50 **Igal Milchtaich**
Implementability of Correlated Equilibria in Games with Incomplete Information

11:50-12:10 **Julia Tokareva** and **Vladimir Mazalov**
Modified Final-offer Arbitration Procedure with Committee

GTIO: room 209
Game Theory and Industrial Organization
Chair – Denis Kuzyutin

11:10 – 11:30 **Philipp Weinschenk**
Strategic delegation of price settings and Bertrand paradox

11:30 – 11:50 **Margarita Gladkova** and Nikolay Zenkevich
Vertical Product Differentiation under Imperfect Information

11:50 – 12:10 Elina Zhukova, **Denis Kuzyutin** and **Nadezhda Smirnova**

Self-segmentation of the Consumers in a Quality-Price Model with Vertical and Horizontal Differentiation

12:10 – 12:30 Ramy Elitzur and **Arieh Gaviols**

Contests in the Venture Capital Industry

12:30 – 14:00 LUNCH, University Center, 2nd floor

14:00 – 16:20 **F2: PARALLEL SESSIONS**

MA: room 211

Management Applications

Chair – Andrea Di Liddo

14:00 – 14:20 **Luigi De Cesare** and **Andrea Di Liddo**

Marketing strategies for periodic subscriptions

14:20 – 14:40 **Gerwald van Gulick**, Anja De Waegenare and Henk Norde

On handling ruin as a business sector

14:40 – 15:00 **Nikolay Kolabutin**, Leon Petrosyan and Nikolay Zenkevich

Yeung condition for dynamic stable joint venture

15:00 – 15:20 **Philippe Mongin** and Franz Dietrich

The premise-based approach to logical aggregation

15:20 – 15:40 **Suriya Kumacheva** and Leon Petrosyan

A game theoretical model of interaction between taxpayers and tax authority

15:40 – 16:00 **Oleg Shchetinin**

Altruism and Career Concern

16:00 – 16:20 **Gustavo Bergantiños** and Anirban Kar

On obligation rules

GTM4: room 209

Game Theory and Management Applications

Chair – André Keller

14:00 – 14:20 **Kari Saukkonen**

Continuity of Infinite State Set Arrovian Social Welfare Functions

14:20 – 14:40 **Dmitri Nizovtsev**

Player ignorance and equilibrium outcomes in security games

14:40 – 15:00 **Dmitri Nizovtsev**

Game-theoretic models of security: a synthesis attempt

15:00 – 15:20 **André Keller**

Fuzzy Logic Games in Economics

15:20 – 15:40 **Xeniya Grigorieva and Olga Zenovich**

Solutions for a Class of Stochastic Coalitional Games

15:40 – 16:00 **Krzysztof Szajowski**

A game related to rank-based selection with cardinal payoffs and a cost of choice

16:00 – 16:20 **Haruo Imai**, Jiro Akita and Hidenori Niizawa

CDM Preemption

16:20 – 16:40 COFFEE BREAK, room 307

16:40 – 17:40 **F3: SESSION**

OA: room 309

Optimal Allocations

Chair – Silvia Lorenzo-Freire

16:40 – 17:00 Gustavo Bergantiños, Leticia Lorenzo and **Silvia Lorenzo-Freire**

New characterizations of the constrained equal awards rule for multi-issue allocation situations

17:00 – 17:20 **Julia Chuyko**

Selfish routing with splittable traffic and incomplete information

17:20 – 17:40 Javier Castro and **Leticia Lorenzo**

Optimal schedule to minimize the expected delay in a PERT network

17:50 – 18:20 **CLOSING SESSION: GRAND HALL, room 309**

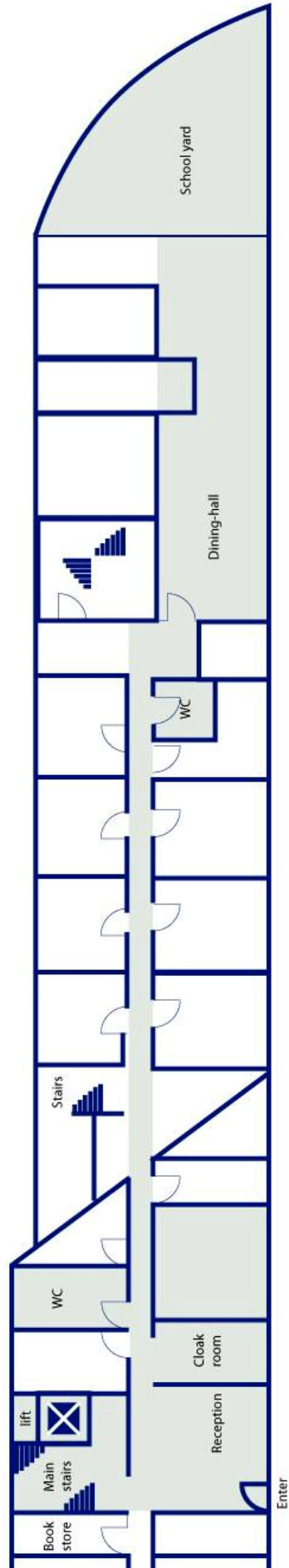
Chair – Leon Petrosyan

19:00 – 22:00 **CONFERENCE BANQUET, restaurant “Academia”**

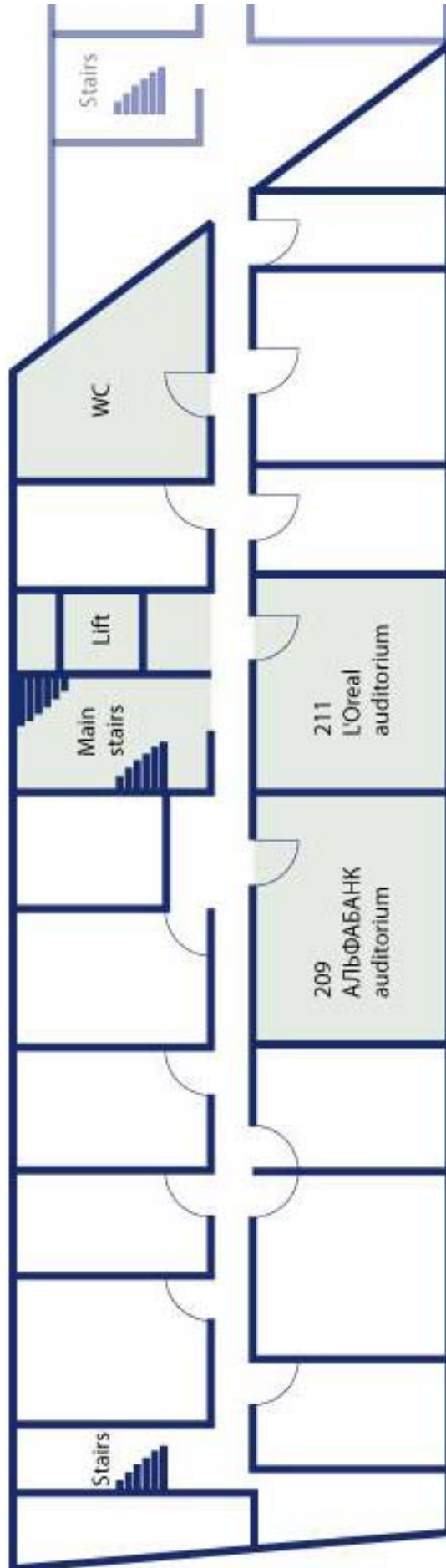
MAP



First floor



Second floor



Third floor

