



The International Symposium on Dynamic Games and Applications

July 8-11, 2002, St. Petersburg, Russia

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PROGRAM

Monday, July 8

9:00 - 10:00	Registration	Assembly Hall
10:00 - 10:30	Opening Session	Assembly Hall
10:30 - 11:30	Plenary Talk (1)	Assembly Hall
11:30 - 12:00	Break	
12:00 - 13:15	Parallel Sessions (M1)	
13:15 - 14:45	Lunch	
14:45 - 16:25	Parallel Sessions (M2)	
16:25 - 16:40	Break	
16:40 - 18:20	Parallel Sessions (M3)	
19:00	Welcome Party	University Center

Tuesday, July 9

9:00 - 10:00	Plenary Talk (2)	Assembly Hall
10:00 - 11:00	Plenary Talk (3)	Assembly Hall
11:00 - 11:30	Break	
11:30 - 13:10	Parallel Sessions (T1)	
13:10 - 14:40	Lunch	
14:40 - 16:20	Parallel Sessions (T2)	
16:20 - 16:35	Break	
16:35 - 18:15	Parallel Sessions (T3)	

Wednesday, July 10

9:00 - 10:00	Plenary Talk (4)	Assembly Hall
10:00 - 10:30	Break	
10:30 - 12:10	Parallel Sessions (W1)	
12:10 - 14:00	Lunch	
14:00 - 15:00	Plenary Talk (5)	Assembly Hall
15:00 - 15:15	Break	
15:15 - 16:55	Parallel Sessions (W2)	
19:00	Banquet	University Center

Thursday, July 11

10:00 - 11:40	Parallel Sessions (Th1)	
11:40 - 12:00	Break	
12:00 - 12:30	Closing Ceremony	Assembly Hall
Afternoon	Excursions	

Monday, July 8

Plenary Talk (1)

10:30 - 11:30 V.N. Ushakov "The method of unification in differential games"

M1 Parallel Sessions

M1.1 Assembly Hall

Non-cooperative Dynamic Games (Chair Ryuichiro Ishikawa)

12:00 - 12:25 Matsuhisa, Takashi and Ryuichiro Ishikawa "Rational expectation can preclude trades"

12:25 - 12:50 Ishikawa, Ryuichiro and Takashi Matsuhisa "Rationality on the final decisions leads to sequential equilibrium"

12:50 - 13:15 Murgu, Alexandru. "Multi-Class Service Dynamics Replication Using Evolutionary Selection Games"

M1.2 Petrovskii Hall

Stochastic Games (Chair Jerzy Filar)

12:00 - 12:25 F. Mignanego and S. Mulinacci "Noncooperative Stochastic Stackelberg Games"

12:25 - 12:50 Filar, Jerzy, Henry A. Krieger and Zamir Syed "Cesaro Limits of Analytically Perturbed Stochastic Matrices"

12:50 - 13:15 Simon, Robert Samuel "A Topological Solution to Quitting Games"

M1.3 Auditorium 70

Pursuit-Evasion Games (Chair Fumiaki Imado)

12:00 - 12:25 Imado, Fumiaki "Some Approaches to Complicated Pursuit-Evasion Dynamic Games"

12:25 - 12:50 Shinar, Josef and Valery Y. Glizer "Improved Results in Delayed Information Pursuit-Evasion Games"

12:50 - 13:15 Barseghyan, V.R. and T.A. Simonyan "Stochastic Differential Game of Deviation from Several Target Sets in Homogeneous Central Field"

M1.4 Auditorium 46

Networking games and Applications (Chair Daniel Granot)

12:00 - 12:25 Serov, Vyacheslav P. "Optimal Feedbacks in the Game Dynamic Generalized Shortest Path Problem"

12:25 - 12:50 Nikonov, Oleg and Yaroslav Minullin "Competition of gas pipeline projects: software, simulations, sensitivity analysis and generalized equilibrium"

12:50 - 13:15 Granot, Daniel, Herbert Hamers, Jeroen Kuipers and Michael Maschler "On the chinese postman game"

M2 Parallel Sessions

M2.1 Assembly Hall

Non-cooperative Dynamic Games (Chair Steffen Jorgensen)

14:45 - 15:10 Fakhretdinova, Victoria A. "Multistage multicriteria problem of decision making under uncertainty"

15:10 - 15:35 Cserny, Laszlo "Organizational Decision-Making as Special Dynamic Game"

15:35 - 16:00 Campos-Nanez, Enrique and Alfredo Garcia "Dynamic Pricing & Learning in Electricity Markets"

16:00 - 16:25 Vseslav A. Korneev "Construction non-smooth Solutions of a Variational Problem in Area"

M2.2 Petrovskii Hall

Stochastic Games (Chair Frank Thuijsman)

14:45 - 15:10 Peeters, Ronald J.A.P. and P. Jean-Jacques Herings "Stationary Equilibria in Stochastic Games: Structure, Selection, and Computation"

15:10 - 15:35 Petrosjan, Leon A. "Cooperative Stochastic Games"

15:35 - 16:00 Grauer, Lidia V. "Folk Theorems for Stochastic Games"

16:00 - 16:25 Flesch, J. and F. Thuijsman "N-Person Switching Control Stochastic Games"

M2.3 Auditorium 70

Pursuit-Evasion Games (Chair Arik A. Melikyan)

14:45 - 15:10 Choi, Han-Lim, Min-Jea Tahk and Hyo-Choong Bang "Novel Co-Evolutionary Method for Solving Pursuit-Evasion Games with Consideration of Lethal Radius"

15:10 - 15:35 Shevchenko, Igor "On Successive Pursuit of Two Evaders"

15:35 - 16:00 Petrov, N.N. and D.A. Vagin "The Two Problems of Group Pursuit"

16:00 - 16:25 Melikyan, A.A. "Pursuit-Evasion Games on the Surfaces of Revolution"

M2.4 Auditorium 46

Minimax, Nash Equilibrium (Chair Alan Washburn)

14:45 - 15:10 Saghatelian, K.V. "On Induced Stochastic Processes on Graphs"

15:10 - 15:35 Nowak, Andrzej S. "Nash equilibria in a class of discounted stochastic games of capital accumulation/resource extraction"

15:35 - 16:00 Timofeeva, Galina A. "Confidence estimates under uncertainty and quantile optimization problem"

15:00 - 16:25 Washburn, Alan, and Ryusuke Hohzaki "The diesel submarine flaming datum problem"

M3 Parallel Sessions

M3.1 Assembly Hall

Non-cooperative Dynamic Games (Chair Vladimir V. Mazalov)

16:40 - 17:05 Melnik, Valentin N. "Strategic two-part optimal trade policy"

17:05 - 17:30 Fayard, Thierry "An Optimiser of Planning for Real Time Strategy Games"

17:30 - 17:55 Flamini, Francesca "Dynamic Accumulation in Bargaining Games"

17:55 - 18:20 Mazalov, Vladimir V. and Anatoly A. Zabelin "Multistage Arbitration Game with Random Offers"

M3.2 Petrovskii Hall

Stochastic Games (Chair Thomas S. Ferguson)

16:40 - 17:05 Shimkin, Nahum "Differential Games and Extremal Large Deviations of Controlled IID Processes"

17:05 - 17:30 Rosenberg, Dinah "Blackell optimality in Markov decision processes with partial observation"

17:30 - 17:55 Raghavan, T.E.S. and Zamir Syed "Stochastic Games with Pure Stationary Optimals"

17:55 - 18:20 Ferguson, Chris and Thomas S. Ferguson "On the Borel and von Neumann Poker Models"

M3.3 Auditorium 70

Differential Games and Application (Chair Jacob C. Engverda)

16:40 - 17:05 Malafeyef, Oleg "Perfect Equilibrium in Non-cooperative Differential Games"

17:05 - 17:30 Avetisyan, V.V. "The problem of optimal guaranteed search and capture of immobile object"

17:30 - 17:55 Engverda, Jacob C. "Solving The Scalar Feedback Algebraic Riccati Equations: An Eigenvector Approach"

17:55 - 18:20 W.A. van de Broek, J.C. Engverda and J.M. Schumacher "Robust Equilibria In Indefinite Linear Quadratic Differential Games"

M3.4 Auditorium 46

Applications (Chair Nikolay A. Zenkevich)

16:40 - 17:05 Pusillo, Lucia "Well-posedness for non-cooperative games and ordinality"

17:05 - 17:30 Zavialova, Tatjana "The analysis of stability of non-linear stochastic system with random impulse in condition of shock of phase vector"

17:30 - 17:55 Laraki, Rida "The splitting game and applications"

17:55 - 18:20 Filippova, Yulia V. and Svetlana I. Tarashnina "Comparison of various political systems on an example of the countries of ex-USSR"

Tuesday, July 9

Plenary Talks (2), (3)

- 09:00 - 10:00 Ehud Kalai "Large Robust Games"
10:00 - 11:00 Arie Hordijk "On Optimality Equations and Normed Ergodicity"

T1 Parallel Sessions

T1.1 Assembly Hall

Non-cooperative Dynamic Games (Chair Jacqueline Morgan)

- 11:30 - 11:55 Cartigny, Pierre and Philippe Michel "On a Sufficient Transversality Condition for Infinite Horizon Optimal Control Problems"
11:55 - 12:20 Ougolnitsky, Guennady A. "Game Theoretic Model of the Sustainable Development"
12:20 - 12:45 Caravani, P. "Feedback Nash Equilibrium of Linearly Constrained Linear Games" and Tikhonov regularization for Stackelberg problems"
12:45 - 13:10 Morgan, Jacqueline and Fioravante Patrone "Subgame perfect equilibria and Tikhonov regularization for Stackelberg problems"

T1.2 Petrovskii Hall

Stochastic Games (Chair Steve Alpern)

- 11:30 - 11:55 Domansky, Victor "Asymptotics of solutions for Dynkin stopping games"
11:55 - 12:20 Andrey N. Liapounov "On the existence of the solutions in the stochastic games"
12:20 - 12:45 Mannor, Shie and Nahum Shimkin "Regret Minimization in Stochastic Games"
12:45 - 13:10 Alpern, Steve "Rendezvous in One and More Dimensions"

T1.3 Auditorium 70

Cooperative Dynamic Games (Chair Shigeo Muto)

- 11:30 - 11:55 Gambarelli, Gianfranco "Dynamic solutions for Transformed Games from Characteristic into Normal Form"
11:55 - 12:20 Aarle, Bas van, Giovanni Di Bartolomeo, Jacob Engwerda and Joseph Plasmans "Staying Together or Breaking Apart: Policy-makers': Endogenous coalitions formation in the European Monetary Union"
12:20 - 12:45 Hidano, Noboru and Shigeo Muto "Extended Self, Game, and Conflict Resolution"

T1.4 Auditorium 46

Differential Game Theory, Algorithms (Chair Arkadii A. Chikrii)

- 11:30 - 11:55 Chikrii, Greta Ts. "One Approach to Solution of Complex Game Problems for Quasilinear Evolutionary Systems"
11:55 - 12:20 Kumkov, Sergey I., Valerii S. Patsko, Sergey G. Pyatko and Andrey A. Fedotov "Construction of the Stable Bridge in a Problem of Aircraft Guiding under Wind Disturbances"
12:20 - 12:45 Cardaliague, Pierre, Marc Quincampoix and Patrick Saint-Pierre "Differential games with state-constraints"
12:45 - 13:10 Chikrii, Arkadii A. "Game Problems for Systems with Fractional Derivatives of Arbitrary Order"

T2 Parallel Sessions

T2.1 Assembly Hall

Non-cooperative Dynamic Games (Chair Alexander Vasin)

- 14:40 - 15:05 Zenkevich, N.A. "A Collusion for Repeated Auction Games with Finite Duration"
15:05 - 15:30 Querou, Nicolas, Patrick Rio and Mabel Tidball "Modeling negotiation process via Multilateral bargaining approach and imperfect information"
15:30 - 15:55 Suzuki, Yutaka "Monotonicity of Optimal Solutions and Existence of Forecast Horizon in Dynamic Games "
15:55 - 16:20 Vasin, Alexander "The Folk Theorems in the Framework of Evolution and Cooperation"

T2.2 Petrovskii Hall

Differential Games. Applications in Economics (Chair Gustav Feichtinger)

- 14:40 - 15:05 Cellini, Roberto and Luca Lambertini "Advertising with Spillover Effects in a Differential Oligopoly Game with Differentiated Goods"
15:05 - 15:30 Calzolari, Giacomo and Luca Lambertini "Export Restraints in a Model of Trade with Capital Accumulation"
15:30 - 15:55 Delenda, Arnaud "An innovative method: WSP"

15:55 - 16:20 Feichtinger, Gustav "Treatment and Law Enforcement versus Offending: A Differential Game Analysis"

T2.3 Auditorium 70

Cooperative Dynamic Games (Chair Victor V. Zakharov)

- 14:40 - 15:05 Zhukovskiy, Vladislav I. and Vitaly S. Molostvov "C-Core in Some Differential Game under Uncertainty"
15:05 - 15:30 Scarelli, Antonino and Zoltan Varga "Dynamic games with fuzzy coalitions in modelling the development of environmental protection"
15:30 - 15:55 Dementieva, Maria B and Victor V. Zakharov "Time-consistent imputations in subcore of dynamic cooperative games"

T2.4 Auditorium 46

Differential Games Theory, Algorithms (Chair Valerii S. Patsko)

- 14:40 - 15:05 Hongwei Gao, Sergey V. Chistyakov and Kristina V. Siniova "Recursive Strategies in a Class of Differential Games"
15:05 - 15:30 Guseinov, Kh.G., Orhan Ozer and Serkan Duzce "On the Inverse Problem of the Differential Inclusion Theory"
15:30 - 15:55 Grigorieva, S.V., V.N. Ushakov and A.A. Uspenskii "Numerical Solution of Differential Games and Cauchy Problem for Hamilton-Jacobi Equation"
15:55 - 16:20 Kamneva, Ludmila V., Valerii S. Patsko and Varvara L. Turova "Construction of the Value Function for Game Brachistochrone Problem"

T3 Parallel Sessions

T3.1 Assembly Hall

Non-cooperative Dynamic Games (Chair Doris A. Behrens)

- 16:35 - 17:00 Behrens, Doris A., Jonathan P. Caulkins, and Gernot Tragler "A Dynamic Game of Two Heterogeneous Regions Suffering from Drug Epidemics"
17:00 - 17:25 Behrens, Doris A. and Reinhard Neck "The Structure of Optimal Decision Rules in a Monetary Union"
17:25 - 17:50 Matveev, Vladimir "Strategic Trade Policy as a Game Problem with Vector-Valued Payoff"
17:50 - 18:15 Radjef, Mohand S. and S. Adjabi "Existence of A objection and counter objection equilibrium in differential game under uncertainty"

T3.2 Petrovskii Hall

Differential Games. Applications in Economics (Chair Georges Zaccour)

- 16:35 - 17:00 Cellini, Roberto and Luca Lambertini "Private and Social Incentives Towards Investment in Product Differentiation"
17:00 - 17:25 Jorgensen, Steffen and Georges Zaccour "Retailer Promotions with Negative Brand Image Effects"
17:25 - 17:50 Jorgensen, Steffen, Sihem Taboubi and Georges Zaccour "Retail Promotions with Negative Brand Image Effects: Is Cooperation Possible?"

T3.3 Auditorium 70

Cooperative TU Games (Chair Yukihiro Funaki)

- 16:35 - 17:00 Borissov, Kirill and Sergei Pechersky "Note on Russian Award Fee Contracts in Principal-Agent Relationships"
17:00 - 17:25 Dragan, Irinel "A Dynamic Algorithm for Computing a Semivalue of a Cooperative TU Game"
17:25 - 17:50 Kornienko, Elena "Cooperative Multistage Hierarchical Game on a Tree"
17:50 - 18:15 Funaki, Yukihiro and Takehiko Yamato "Credible Coalition Structures with Externalities"

T3.4 Auditorium 46

Differential Games Theory, Algorithms (Chair Anatolii F. Kleimenov)

- 16:35 - 17:00 Chikrii, Arkadii A., Greta Ts. Chikrii and Konstantyn Y. Volyanskyy "Game Problems of Pursuit for Evolutionary Conflict-Controlled Processes"
17:00 - 17:25 Kumkov, Sergey S. and Valerii S. Patsko "Level Sweeping of the Value Function in Linear Differential Games"
17:25 - 17:50 Lukoyanov, Nikolai Yu. "Necessary and Sufficient Conditions for the Value of a Differential Game with Hereditary Information"
17:50 - 18:15 Kleimenov, Anatolii F. and Sergei I. Osipov "Stackelberg Positional Strategies in a Two Persons Hierarchical Differential Game with Disturbance"

Wednesday, July 10

Plenary Talk (4)

9:00-10:00 Nicholas Vieille "Some Recent Results on Stochastic Games"

W1 Parallel Sessions

W1.1 Assembly Hall

Cooperative TU Games (Chair Agnieszka Wiszniewska-Matyszkiewicz)

10:30 - 10:55 Maschler, Michael "Consistency"

10:55 - 11:20 Akimova, Arina N. and Victor V. Zakharov "The Time-Consistency Problem for Quasi-Core in Dynamic TU-Cooperative Games"

11:20 - 11:45 Yanovskaya, Elena B. and Elena Lezhnina "Flexibility of the Least Core"

11:45 - 12:10 Wiszniewska-Matyszkiewicz, Agnieszka "Modelling stock exchange by dynamic games with a continuum of players"

W1.2 Petrovskii Hall

Applications of Differential Games Theory (Chair Pierre Bernhard)

10:30 - 10:55 Mazalov, Vladimir V. and Anna N. Rettieva "On a reserved territory approach for a resource management problem"

10:55 - 11:20 Zenkevich, Nikolay A. and O.S. Kozell "One Game-Theoretic Model of Entry Deterrence using Joint Venture"

11:20 - 11:45 Yoshida, Yuji, Masami Yasuda, Jun-ichi Nakagami and Masami Kurano "American Put Option Models with Uncertainty of Stock Prices in Financial Engineering"

11:45 - 12:10 Bernhard, Pierre and Naima El Farouq "An Impulsive Differential Game Arising in Finance With interesting Singularities"

W1.3 Auditorium 70

Search Games (Chair Shmuel Gal)

10:30 - 10:55 Mestnikov, S.V. "Approximation of the information set in a differential search game with a detail of pursuers"

10:55 - 11:20 Kikuta, Kensaku "A Search Game on a Cyclic Graph"

11:20 - 11:45 Gal, S. and J.V. Howard "Rendezvous search in n cells with incomplete information"

11:45 - 12:10 Gal, Shmuel "On a Minimax Property of Geometric Trajectories"

W1.4 Auditorium 46

Differential Game Theory, Algorithms (Chair Jacek B. Krawczyk)

10:30 - 10:55 Rincon-Zapatero, Juan Pablo and Guiomar Martin-Herran "A Direct Method to Compare Efficient and Non-Efficient Payoffs in Differential Games"

10:55 - 11:20 Mukaidani, Hiroaki and Koichi Mizukami "Numerical Algorithm for Solving Cross-Coupled Algebraic Riccati Equations Related to H_2/H_∞ Control Problem of Singularly Perturbed Systems"

11:20 - 11:45 Mokhonko, Elena Z. "Time-Delayed Information in Some Nonantagonistic Differential Game"

11:45 - 12:10 Mikaelyan, O. "One Differential Game with Preferences"

Plenary Talk (5)

14:00-15:00 Sergiu Hart "Adaptive Dynamics"

W2 Parallel Sessions

W2.1 Assembly Hall

Cooperative TU Games (Chair Michele Breton)

15:15 - 15:40 Gobel, Frank and Jurgen Scheffran "Extended Power Values and Dynamic Coalition Formation"

15:40 - 16:05 Masuda, Takeshi and Shigeo Muto "Farsighted Stability in Duopoly Markets with Product Differentiation"

16:05 - 16:30 Melnikov, Valeriy V. "The cooperative model of collective safety system in ecology"

16:30 - 16:55 Breton, Michele, Karima Fredj and George Zaccour "Characteristic functions, coalitions Stability and free-riding in a game of pollution control"

W2.2 Petrovskii Hall

Differential Games. Applications in Economics and Management (Chair Alain Haurie)

- 15:15 - 15:40 McKelvey, Robert and Peter V. Golubtsov "The Effects of Incomplete Information in Stochastic Common-Stock Harvesting Games"
- 15:40 - 16:05 Martin-Herran, Guiomar and Juan Pablo Rincon-Zapatero "On Efficient Subgame Perfect Nash Equilibria in Dynamic Fishery Games"
- 16:05 - 16:30 Krawczyk, Jacek B. and Mabel Tidball "Economic Coordination in an Environmental Dynamic Game"
- 16:30 - 16:55 Alain Haurie "Multi-time scale models for global climate change policy assessment"

W2.3 Auditorium 70

Minimax, Nash Equilibrium (Chair Lev M. Bregman)

- 15:15 - 15:40 Ryan, Michael J. "Intervening Duality Strategic Equivalence and Nonconstant Sum Bimatrix Games"
- 15:40 - 16:05 Bregman, Lev M. and Igor N. Fokin "Nash Equilibrium for Multiperson Resource Allocation Games"
- 16:05 - 16:30 Bregman, Lev M. and Tatyana T. Bregman "Product Form Representation for Strategies in Combinatorial Matrix Games"

W2.4 Auditorium 46

Differential Games Theory, Algorithms (Chair David W. K. Yeung)

- 15:15 - 15:40 Subbotina, Nina N. "Sufficient Optimality Conditions for Feedbacks to Control Problems"
- 15:40 - 16:05 Virtanen, Kai, Tuomas Raivio and Raimo P. Hamalainen "An Influence Diagram Approach to One-on-One Air Combat"
- 16:05 - 16:30 Yeung, David W. K. "Infinite-Time Stochastic Differential Games with Uncertainty in Number and Types of Players"
- 16:30 - 16:55 Soravia, Pierpaolo "On Feedback Solutions of the H_{∞} Control Problem for Nonlinear Systems"

Thursday, July 11

Th1 Parallel Sessions

Th1.1 Assembly Hall

Differential Games and Applications (Chair Leon Petrosjan)

- 10:00 - 10:50 Breitner, M.H. "Rufus P. Isaacs and the Early Years of Differential Games: A Survey and Discussion Paper"
- 10:50 - 11:15 Guiomar Martin-Herran, Pierre Cartigny, Estelle Motte and Mabel Tidball "Deforestation and Foreign Transfers: A Differential Game Approach"
- 11:15 - 11:40 Meinhardt, Holger "A Dynamic Resource Management Problem"

Th1.2 Petrovskii Hall

Applications in Economics and Management (Chair Jose Luis Ferreira)

- 10:00 - 10:25 Marianna Troeva "Equilibrium in a diffusion conflict model of economy with distributorship"
- 10:25 - 10:50 Ouardighi, Fouad El and Federico Pasin "Advertising and Quality Decisions Under Dynamic Conditions"
- 10:50 - 11:15 Azouzi, R. El "Avoiding Paradox in Routing Games in Networks when Travel Demand is Elastic"
- 11:15 - 11:40 Ferreira, Jose Luis "The Role of Observability in Futures Markets"

Th1.3 Auditorium 70

Applied Probability and Combinatorics in stochastic games (Chair Eitan Altman)

- 10:00 - 10:25 Szajowski, Krzysztof "Game version of the Bruss' problem"
- 10:25 - 10:50 Altman, Eitan, Konstantin Avrachenkov and Jerzy Filar "An Asymptotic Simplex Method and Markov Decision Processes"
- 10:50 - 11:15 Altman, Eitan and Rafi Hassin "Non-Threshold Equilibrium for Customers Joining an M/G/1 Queue"

Th1.4 Auditorium 46

Cooperative Dynamic Games (Chair Christian Schmidt)

- 10:00 - 10:25 Radjef, Mohand S. and Fodil Laib "The Strong Imputation Solution in Dynamic Cooperative Games"
- 10:25 - 10:50 Radjef, Mohand S. and S. Adjabi "On the Existence of a Stable Imputation in a Positional Cooperative Differential Game"
- 10:50 - 11:15 Schmidt, Christian "Dynamising Cooperative Games: Some Suggestions"