International Symposium on Operations Research and Game Theory: Modeling and Computation

Program Overview

Inaugural Session Details

January 9, 2018 Time: 10:00 -10:30 Venue: Auditorium

Welcome address, Opening Remarks, About symposium, Vote of Thanks

Tea Break: 10:30 -10:45

Sessions Details

January 9, 2018 Time: 10:45 -13:00 Venue: Auditorium

Invited Session I

Chairman : S. K. Neogy, Indian Statistical Institute, Delhi Centre

1.	Katta G. Murty (University of Michigan, Ann Arbor, USA) (jointly with David L.
	Kaufman and Peter Benson) Sphere Method 7-3 Using No Matrix Inversions for
	Linear Programs (LPs)
2.	Zdenek Dostal (VSB-Technical University Ostrava, Czech Republic) Fast algorithms
	for QP and QCQP problems with applications
3.	Cidambi Srinivasan (jointly with Richard Charnigo) University of Kentucky, USA,
	Inference for a Nonparametric Model without Nonparametric Estimation

Lunch Break: 13:00 -14:00

January 9, 2018 Time: 14:00 -15:20 Venue: Auditorium

Invited Session II

Chairman: Bo Chen, University of Warwick, UK

1.	Pierre Flener (Uppsala University, Sweden) Constraint Based Modelling and Solving of
	Combinatorial Problems
2.	Sandeep Juneja (Tata Institute of Fundamental Research, Mumbai, India) Perfect Sampling for
	Gibbs Processes with a focus on Hard-sphere Models

Tea Break: 15:20 -15:45

January 9, 2018 Time: 15.45 -18:00 Venue: Auditorium Technical Session-I A

Chairman : Juan Enrique Martínez-Legaz, Universitat Autònoma de Barcelona, Spain

1.	Monica Patriche (University of Bucharest) Existence of the equilibrium in choice
2.	Sujatha Babu (Indian Institute of Technology Madras), Usha Mohan, Tiru Arthanari,
	Modeling coopetition as a Quantum game
3	Anjali Singh and Anjana Gupta (Delhi Technological University, India), Optimization
	based consensus model to solve multi criteria large group decision making problems
4.	Sagnik Sinha (Jadavpur University, Kolkata), Kushal Guha Neogy, Prasenjit Mondal,
	On Zero-Sum Two-Person Perfect Information Semi-Markov Games
5.	Prasenjit Mondal (Government General Degree College at Ranibandh, Bankura) On Single
	Controller Semi-Markov Games Under Limiting Ratio Average Payoff
6.	Akash Singh and Uttam Kumar Bera (National Institute of Technology Agartala) A
	Mathematical Model for a Multi-Objective Solid Transportation Problem in Hilly Areas
7.	Bijoy Krishna Debnath (National Institute of Technology Agartala), Pinki Majumder,
	Uttam Kumar Bera, A fuzzy economic order quantity (FEOQ) inventory model: A fuzzy
	differential equation approach

January 9, 2018 Time: 15.45 -18:00 Venue: Conference Room Technical Session-I B

Chairman : T. Parthasarathy, Chennai Mathematical Institute, Chennai, India

1.	P. Aparna (MBA Dept, Sir CRReddy PG Courses, Eluru) <i>Extended abstract for Travelling Salesman problem in Business Analytics</i>
2.	Akanksha Singh (Thapar University, Patiala, Punjab) Modified non-linear programming method for multi-criteria decision making problems under interval neutrosophic set environment
3.	Tina Verma (Indian Institute of Technology, Ropar), Arvind Kumar Gupta, A bi-objective programming approach for solving imprecise matrix games by considering Payoff as intervals
4.	Shahid Ahmad Bhat (Thapar University, Patiala, Panjab) A fuzzy AHP approach to
	construct international hotel spa atmosphere evaluation model: Suggested modification
5.	Mamta Agrawal (VIT Bhopal University) Computational Model to Study Temperature
	Distribution In Deep Tissue Of Human Limb Containing Liposarcoma Tumor
6.	Shivani Gupta (University of Delhi), Vandana Gupta, On the Reliability of Secured
	Communication in Vehicular Ad-Hoc Networks
7.	Arshdeep Kaur (Thapar University, Patiala, Punjab) The Inclusion-Based LINMAP Method
	for Multiple Criteria Decision Analysis Within an Interval-Valued Atanassov's Intuitionistic
	Fuzzy Environment: Suggested Modification

January 9, 2018 Time: 18:30-20:00 Cultural Programme followed by Dinner

Venue: Auditorium, Dinner: Guest House Lawn

January 10, 2018 Time: 10:00 -11:20 Venue: Auditorium

Invited Session III

Chairman: Katta G. Murty, University of Michigan, Ann Arbor, USA

1.	Juan Enrique Martínez-Legaz (Universitat Autònoma de Barcelona, Spain), Extensions of the
	Frank-and-Wolfe Theorem
2.	Masahiro Hachimori (University of Tsukuba, Japan), Partitioning simplicial complexes and their
	<i>h-triangles</i>

Tea Break: 11:20 -11:40

January 10, 2018 Time: 11:40 -13:00 Venue: Auditorium

Invited Session IV

Chairman: T E S Raghavan, University of Illinois at Chicago, USA

Andrey Garnaev (Saint Petersburg State University, Russia) Revising a search game: Rival might 1. not be rational 2.

Bo Chen (University of Warwick, UK), Analysis of a Procurement Game with Option Contracts

Lunch Break: 13:00 -14:00

Invited Session V

January 10, 2018 Time: 14:00 -16:00 Venue: Auditorium

Chairman: Andrey Garnaev, Saint Petersburg State University, Russia

1.	Satoru Takahashi (National University of Singapore) Blackwell Equilibria
2.	J. Jude Kline (University of Queensland, Brisbane, Australia) (jointly with Thierry Lavendhomme
	and Samuel Waltener) From Memories to Inductively Derived Views: A Constructive Approach
3.	Anna Khmelnitskaya (Saint-Petersburg State University, Russia) (jointly with Gerard van der Laan
	and Dolf Talman) Centrality rewarding Shapley and Myerson values for undirected graph games

Tea Break: 16:00 -16:15

January 10, 2018 Time: 16:15 -18:15 Venue: Auditorium Technical Session-II A Chairman : Pierre Flener, Uppsala University, Sweden

1.	Amita Sharma, (Indian Institute of Information Technology Guwahati), Anubha Goel,
	Aparna Mehra, Deviation Measure in Second Order Stochastic Dominance with an
	Application to Enhanced Indexing
2.	D. Aussel, J. Dutta and T. Pandit (IIT Kanpur, India), About the links between equilibrium
	problems and variational inequalities
3.	Hamidur Rahman (Indian Institute of Technology Bombay, Mumbai, India) and
	Ashutosh Mahajan, Facets of a Mixed-Integer Bilinear Covering Set with Bounds on
	Variables
4	Manish Sarkhel, and Nagarajan Krishnamurthy (Indian Institute of Management (IIM)
	Indore, India, Stability in core-periphery production networks
5	Umakanta Pattanayak (Indian Institute of Technology Bombay, Mumbai, India), Vishnu
	Narayanan, Geometry of Integer hulls of Strictly Convex Sets
6.	Tejas Ghorpade and Narayan Rangaraj (Indian Institute of Technology Bombay, India)
	Two-step Algorithm for Pickup-Delivery Problem
7.	Sarvesh Bandhu (Indian Statistical Institute, Delhi) Strategy-Proof Random Social Choice
	Rules with Lexicographic Ordering.

January 10, 2018 Time: 16.15 -18:15 Venue: Conference Room

Technical Session-II B

Chairman: T.E.S. Raghavan, University of Illinois at Chicago

1.	Karuna (University of Delhi, India) C.S. Lalitha, Approximate weak efficient solutions and
	continuity in parametric set Optimization
2.	KC Lalropuia (University of Delhi), Vandana Gupta, Dependability analysis of internet of
	things (IoT) under attack based on game theory and semi-Markov process.
3.	Akansha Mishra (Thapar University, Patiala Punjab, India), Some Picture Fuzzy
	Aggregation Operators and Their Applications to Multicriteria Decision-Making: Suggested
	Modifications
4	Chayanika Rout, Debjani Chakraborty and Adrijit Goswami (Indian Institute of
	Technology, Kharagpur - 721302, India) An EPQ Model for Deteriorating Items with
	Imperfect Production, Two Types of Inspection Errors and Rework
5.	Anju Saini (VIT Bhopal University, Bhopal, India), V.K. Katiyar and Sarita, Mathematical
	Simulation of Incompressible Newtonian Blood Flow with a Multiple Stenosed Artery
6.	Sarita Singh (Doon University Dehradun, India), V.K. Katiyar, Pulsatility Effect of Oxygen
	Transport In Human Lung Bifurcation: A Numerical study
7.	Sonali Sethi (School of Mathematics, Thapar University, Patiala, India) Duality for a class
	of non-differentiable minimax fractional programming problems with generalized invexity

January 11, 2018 Time: 10:00 -11:20 Venue: Auditorium

Invited Session VI

Chairman: Yasunori Kimura, Toho University, Funabashi, Japan

1.	T.E.S. Raghavan (University of Illinois at Chicago) On completely mixed equilibria and
	equilibrium payoffs in game forms and in normal form games
2	T. Parthasarathy (Chennai Mathematical Institute, Chennai, India) Univalence Principle in the
	sense of Gale and Nikaido

. Tea Break: 11:20 -11:40

January 11, 2018 Time: 11:40 -13:00 Venue: Auditorium

Invited Session VII

Chairman: T. Parthasarathy (Chennai Mathematical Institute, Chennai, India

1.	J. Dutta (Indian Institute of Technology Kanpur, India) Detecting the Convexity of a Function and
	related Issues
2.	Yasunori Kimura (Toho University, Japan), Iterative methods for finding a fixed point of a mapping
	on geodesic spaces

Lunch Break: 13:00 -14:00

January 11, 2018 Time: 14:00 -16:00 Venue: Auditorium

Invited Session VIII

Chairman: Anna Khmelnitskaya (Saint-Petersburg State University, Russia)

1.	S Dharmaraja (Indian Institute of Technology Delhi) Optimal trading problem under stochastic
	dominance constraints and autoregressive price dynamics
2.	C.S. Lalitha (University of Delhi, India) Pointwise and global well-posedness in set optimization:
	A direct approach
3.	Pankaj Gupta (University of Delhi, India) Multi-attribute Decision Making

Tea Break: 16:00 -16:15

January 11, 2018 Time: 16:15 -18:15 Venue: Auditorium Technical Session-III A

Chairman : Joydeep Dutta, Indian Institute of Technology, Kanpur, India

January 11, 2018 Time: 16:15 -18:15 Venue: Auditorium Technical Session-III A

Chairman : Joydeep Dutta, Indian Institute of Technology, Kanpur, India

1	Shiva Kapoor (University of Delhi), C. S. Lalitha, Painleve-Kuratowski convergence of solution
	sets in unified vector optimization
2.	Rohit Gupta (IIM, Lucknow), Indranil Biswas, Sushil Kumar, Pricing decisions for three-tier
	aunaly shein under fuzzy any incoments A game theoretic anarcosh
	supply chain under fuzzy environment. A game-meoretic approach
3.	Ruchika Sehgal (Indian Institute of Technology Delhi) and Aparna Mehra, <i>Robust Gini Mean</i>
	Difference Portfolio Optimization
4.	Akhilesh Kumar (Delhi Technological University) Anjana Gupta, Aparna Mehra, A Bilevel
	Programming Model for a Cohesive Decision Making on Strategic Pricing and Production
	Distribution Planning for a Small Scale Supplier
5.	Meenakshi Gupta (University of Delhi), Manjari Srivastava, Well-Posedness and Scalarization
	in set Optimization
6	Pankaj Gupta, Mukesh Kumar Mehlawat, Nishtha Grover (University of Delhi) Witold
	Pedrycz, An extended TOPSIS method under interval-valued intuitionistic fuzzy environment
7.	Abdullah Al-Qudaimi (Thapar University, Patiala, Punjab) Fuzzy Regression Models Using the
	Least-Squares Method Based on the Concept of Distance: Suggested modifications

January 11, 2018 Time: 16.15 -18:15 Venue: Conference Room

Technical Session-III B

Chairman: Anna Khmelnitskaya, Saint-Petersburg State University, Russia

1.	Priyanka Yadav (University of Delhi), C. S. Lalitha, Optimality conditions for optimization
	problems with nonconvex feasible set
2.	Mansi Dhingra (University of Delhi), C. S. Lalitha, Henig subdifferential for a set-valued
	optimization problem
3.	Vivek Laha, Pushkar Jaisawal (Banaras Hindu University) On Sufficiency and Duality for
	multiobjective programming problems using convexificators
4	Anurag Paul, Kabir Rustogi (Delhivery, Plot 5, Sector 44, Gurgaon) Optimizing the Last-
	Mile in Ecommerce Logistics using Sub-contracting Options and Historic GPS
	Location Data
5.	Rohit Gupta (Indian Institute of Management Lucknow) Indranil Biswas,
	Sushil Kumar, Pricing decisions for three-tier supply chain under fuzzy environment: A
	game-theoretic approach
6	Bhawna Kohli (Department of Mathematics, University of Delhi, Delhi, India) Necessary
	and sufficient optimality conditions using convexifactors for mathematical programs with
	equilibrium constraints