

CONFERENCE VENUE: AUDITORIUM BUILDING 70

Session Chair	Day 1 Tuesday, Dec 10	Program	Title of Talks
	08:00 - 09:00	Registration/Coffee	
<i>Monther Alfuraidan</i>	09:00 - 09:50	Opening	
<i>Enrique Zuazua</i>	10:00 - 10:50	Nizar Touzi	Martingale Distributionally Robust Sensitivity
	11:00 - 11:15	Coffee Break	
<i>Raul Tempone</i>	11:15 - 12:05	Enrique Zuazua	Control and Machine Learning
	12 :15 - 13:15	Prayer/Lunch Break	
<i>Nizar Touzi</i>	13:15 - 13:55	Raphael Douady	Financial Network Analysis Using PolyModel Theory
	14:05 - 14:45	Mario Lefebvre	Optimal control problems for modified queueing systems
	14:55 - 15:15	Prayer/Coffee Break	
PARALLEL SESSIONS			
Session Chair: Rajai Alassar (57-Room 104)		Session Chair: Nasser Eddine Tatar (57-Room 106)	
Hamza Ruzayqat 15:15 - 15:35	Unbiased Estimation using the Underdamped Langevin Dynamics	Milica Andjelic 15:15 - 15:35	Eigenvalue free intervals of distance matrices of threshold and chain graphs
Ahmed Al Kasbi 15:40 - 16:00	Optimizing Time-Varying Effluent Discharge in Tidal Waters and Sloping Beaches	Pieter Boom 15:40 - 16:00	A Geometric Formulation of the Navier-Lame Equation using Discrete Exterior Calculus
Anwar Almualim 16:05 - 16:25	Dynamic Cooperative Investment by Prospect Theory	Sani Salisu 16:05 - 16:25	The Effect of Geodesic Convexity in Fixed Point Theory and Convex Optimization
Axel Dorian 16:30 - 16:50	High-Resolution Stress Models of Poro-Elastic Deformation in Pressure-Saturated Porous Media	Moin-ud-Din Junjua 16:30 – 16:50	Exploring new optimal fourth-order derivative free iteration techniques for solving nonlinear equations and their applications
	16:55 - 17:15	Prayer/Coffee Break	
Session Chair: Manal Otaibi (57-Room 104)		Session Chair: Othman Echi (57-Room 106)	
Suha Al-Shaikh 17:15 – 17:35	Riemannian manifolds isometric to a sphere	Mohamed Belkhefala 17:15 – 17:35	Properties of hypersurface in some Thurston geometries
Anatoly Alikhanov 17:40 – 18:00	A second order explicit difference scheme for Volterra integro- differential equations with a difference kernel and its applications	Jamilu Yahaya 17:40 – 18:00	Development and challenges associated with conjugate gradient methods for vector optimization

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Session Chair	Day 2 Wednesday, Dec 11	Speaker	Title of Talks
	08:00 - 08:30	Registration/Coffee	
<i>Rolf Krause</i>	08:30 – 09:20	Alex Pothen	Matchings in Big Graphs: Approximation and Streaming Algorithms
	09:30 – 10:10	Eric Chung	Model-based and data-driven computational multiscale methods
	10:20-10:50	Coffee Break	
<i>Eric Chung</i>	10:50 – 11:30	Diogo Gomes	Monotonicity Methods for Mean Field Games: A Functional Analytic Perspective
	11:40 – 12:20	Raul Tempone	Stochastic Optimization: Adaptive Variance Reduction and Bayesian Quasi-Newton Methods
	12:30 – 13:30	Prayer/Lunch Break	
<i>Rachid Ait Haddou</i>	13:30 – 14:10	Daniele Boffi	A numerical model for fluid structure interactions based on a fictitious domain approach
	14:20 – 15:00	Rolf Krause	Nonlinear Preconditioners for Solving Phase-Field Fracture Problems
	15:10 – 15:30	Prayer/Coffee Break	
<i>Ashfaque Bokhari</i>	15:30 – 16:10	Ali Turab	Computational Analysis of Animal Behavior Using Mathematical Modeling and Machine Learning Techniques

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Session Chair	Day 3 Thursday, Dec 12	Speaker	Title of Talks
<i>Mohamed Amine Khamsi</i>	09:00 – 09:50	Jacques Verstraete	Recent progress in Ramsey Theory
	10:00 – 10:40	Ryan Martin	Counting Cycles in Planer Graphs
	10:50-11:15	Coffee/Photo Break	
<i>Jacques Verstraete</i>	11:15 – 11:55	Sergey Shpectorov	Enumeration of possible strongly regular graphs with parameters (85,14,3,2)
	12:05 – 13:15	Prayer/Lunch Break	
<i>Sergey Shpectorov</i>	13:15 – 14:05	Mohamed Amine Khamsi	A 40-Year Mathematical Journey: From UCED to AI-Driven Insights in the Dirichlet Energy Problem
	14:15 – 14:55	Vasile Berinde	Avatars of a concept from Fixed Point Theory in Graph Theory and Theoretical Computer Science
	15:00-15:15	Prayer/Coffee Break	
PARALLEL SESSIONS			
Session Chair: Abdelslam Mimouni (57-Room 104)		Session Chair: Khaled Furati (57-Room106)	
<i>Ibrahim Arzuka</i> 15:25 – 15:45	Double direction method for monotone variational inequality problems	<i>Nasiru Salihu</i> 15:25 – 15:45	An Improved Conjugate Gradient Methods for Riemannian Manifold on Nonconvex Optimization Problems
<i>Ghaziyah Alsahli</i> 15:50 – 16:10	On successive approximations for strictly pseudocontractive mappings in Banach Spaces	<i>Abdulwahab Ahmad</i> 15:50 – 16:10	Efficient Inertial Halpern-type Relaxed CQ Algorithms with Applications in Classification Problems
<i>Monther Alfuraidan</i>	16:15	Concluding Session	