ICMSA 2025

ICMSA'2025 website

Faculty of Mathematics, Computer Sciences and Sciences of Matter
8 May 1945 Guelma University

Laboratory of Analysis and Control of Differential Equations ACED

CERTIFICATE

This is to certify that

Toufik Heraiz

University of Mohamed Boudiaf-M'sila, Algeria.

presented a talk titled

Essential Spectrum of the Sequence of Bounded Operators via the S-v-Convergence

during *The Second International Conference on Mathematical Sciences and Applications* October 27-29, 2025.

Université 8 Mai 1945 Guelma — The Second International Conference on Mathematical Sciences and Applications (ICMSA'25) — Faculté des Mathématiques et de l'Informatique et des Sciences de la Matière

Président du Comité d'Organisation
Pr. BOULARES Hamid

Prof. Hamid BOULARES
Department of Mathematics,
8 May 1945 Guelma University

Numerically signed
204-P-1IPF

Timetable

Monday, October 27

08:00–09:00	**Reception & Registration**		
09:00–09:30	**Opening Ceremony**		
09:30–10:30	IS	**Prof. Lahcène Chorfi** U. Annaba, Algeria	Some inverse problems in PDE
10:30–11:00	**Poster session 1 & Coffee break,** see page 15		
11:00–13:00	CT	**Parallel Talks** See page 3	Halls 1-4
13:00–14:15	**Lunch break**		
14:15–15:00	IS	**Prof. Chouhaid Souissi** U. Sfax, Tunisia	Boundary Value Problems of p-Laplacian Type on a Class of Nested Fractals
15:00–15:30	**Poster session 2 & Coffee break,** see page 15		
15:30–17:15	CT	**Parallel Talks** See page 5	Halls 1-4

Tuesday, October 28

09:00–10:00	IS	**Prof. Ayman Ammar** U. Sfax, Tunisia	Quelques résultats de la théorie spectrale des opérateurs linéaires
10:00–10:30	**Poster session 3 & Coffee break,** see page 15		
10:30–12:30	CT	**Parallel Talks** See page 7	Halls 1-4
12:30–14:00	**Lunch break**		
14:00–14:45	IS	**Prof. Salah Badraoui** U. Guelma, Algeria	Panoramic vision on global existence of some reaction-diffusion equations
14:45-15:00	**Coffee break**		
15:00-17:00	CT	**Parallel Talks** See page 9	Halls 1-4

Wednesday, October 29

09:00–10:00	IS	**Prof. Nadjib Boussetila** U. Guelma, Algeria	A tutorial on inverse and ill-posed problems for anomalous diffusion phenomena
10:00–10:30	**Coffee break**		
10:30–13:45	CT	**Parallel Talks online** See page 11	Halls 1-4
14:00–17:00	**Social trip**		

General Information and Welcome Note

Dear participants, on-site registration will be available on **October 26** at the **Lala Maouna Hotel**. Please note that attending the conference is permitted even if you have not yet completed registration.

IS: Invited Speaker **CT:** Contributed Talk **(remote)** Online Talk

Honorary Presidents:
Prof. Mahmoud Debabeche, Rector of the University 8 May 1945, Guelma.
Prof. Athmane Meddour, Dean of the Faculty of Mathematics, Computer Science and Material Sciences.

All oral sessions will be held at the **Library of the University 8 May 1945 Guelma**. **Halls 1, 2, and 3** are located on the **ground floor**, while **Hall 4**, on the **second floor**.

Participants are warmly encouraged to attend other sessions and interact with speakers. Such exchanges contribute greatly to the scientific atmosphere and foster collaboration.

A **technical assistance team** will be present in each hall to help speakers set up their presentations. Presenters are kindly requested to arrive a few minutes before their session to ensure smooth transitions.

Coffee breaks between sessions will offer opportunities for informal discussions and networking among participants.

To maintain the program's flow, all speakers are kindly asked to respect their allocated time.

The Organizing Committee wishes you a pleasant stay in Guelma and a fruitful and inspiring conference experience.

Université 8 Mai 1945 Guelma
The Second International Conference on Mathematical Sciences and Applications (ICMSA'25)
Faculté des Mathématiques et de l'Informatique et des Sciences de la Matière

Président du Comité d'Organisation
Pr. BOULARES Hamid

Monday, October 27, 11:00 – 13:00,

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Pr. BOUHARES Hamid

Hall 1: Fractional calculus,

Chairman: Dr. Fatima Aissaoui

11:00 – 11:15	**Djaafer Mezhoud**, ENP Constantine	Variable-Order Fractional Differential Equations: Applications to RLC Circuits and Efficient Numerical Approaches
11:15 – 11:30	**Allaoua Mehri**, U. El Tarf	Finite Element Analysis of a Multi-Term Nonlinear Time-Fractional Convection-Diffusion Equation with Caputo-Fabrizio Derivative
11:30 – 11:45	**Karima Benhamza**, U. Guelma	Enhancing IoMT Security Through an Efficient XGBoost-Based Intrusion Detection System
11:45 – 12:00	**Souad Chentout**, U. STHB	Eigenvalue Criteria for Existence and Nonexistence of Positive Solutions for α-Order Fractional Differential Equations
12:00 – 12:15	**Choukri Derbazi**, U. Constantine-1-	Some New Uniqueness Results for a System of Nonlinear Fractional Differential Equations in Spaces Endowed with Vector-Valued Norms under L^p-Carathéodory Conditions
12:15 – 12:30	**Abdourazek Souahi**, U. Annaba	Fractional Equations within a Fuzzy-Time Framework: Modeling and Analysis
12:30 – 12:45	**Ghania Rebiai**, U. Guelma	On the Iterative Learning Control
12:45 – 13:00	**Frioui Assia**, U. Guelma	Parametrized Multiplicative Integral Inequalities

Hall 2: Numerical Analysis,

Chairman: Prof. Nadjib Bousstilla

11:00 – 11:15	**Grara Kamila**, U. Guelma	On the Properties of the Alpha Power Transformation of the Remkan Distribution
11:15 – 11:30	**Amer Mesbahi**, U. Souk Ahras	A New Block Method for Computing the Symplectic Schur Form
11:30 – 11:45	**Romaissa Mellal**, U. Guelma	A Novel Hybrid Conjugate Gradient Formula for Unconstrained Optimization Problems
11:45 – 12:00	**Ali Ahmed**, U. Guelma	Generalized Expansive Mappings and Related Common Fixed Point Results in Dislocated Metric Spaces
12:00 – 12:15	**Ramzi Benaicha**, U. Annaba	Anomaly Detection and Failure Prediction in Angular Encoders for Satellite Tracking Systems
12:15 – 12:30	**Nawel Haouas**, U. Batna-2-	Estimating the Second Order Regular Variation Parameter and Bias Reducing to Tail Index Estimation under Random Truncation

Hall 3: ODE and PDE,

Chairman: Prof. Khaireddine Fernane

11:00 – 11:15	**Raghdi Mourad**, U. Guelma	Global Solutions of Reaction-Diffusion Systems with Fractional Laplacian on Whole Space
11:15 – 11:30	**Abderrezak Chaoui**, U. Guelma	On the Study of Degenerate Evolution p-Laplace Equation with Memory Term and Unknown Boundary Dirichlet Condition
11:30 – 11:45	**Bouchelaghem Faycal**, ES-Sc. G. Annaba	Study Dynamic Equations Using Fixed Points Theorems
11:45 – 12:00	**Louafi Meriem**, NHMS Algiers	No-Regret and Low-Regret Control for a Weakly Coupled Abstract Hyperbolic System
12:00 – 12:15	**Aymen Houamed**, U. Khenchela	Global Weak Solution of a 2 x 2 Hyperbolic System
12:15 – 12:30	**Selma Ellaggoune**, Ens Constantine	First-Order Averaging Method for Analyzing Limit Cycles Bifurcation in Quadratic Isochronous Centers
12:30 – 12:45	**Abdelkader Kerraci**, U. Khemis Miliana	Mathematical Modeling and Robust Sine-Wave Trajectory Tracking Control of a Nonlinear Magnetic Levitation System

Hall 4: Numerical analysis and PDE,

Chairman: Dr. Badreddine Meftah

11:00 – 11:15	**Youssouf Chahma**, U. SW Jiaotong	Sign-Changing Solutions for Some Elliptic Problems Involving the p-Laplacian Operator (remote)
11:15 – 11:30	**Messikh Chahrazed**, U. Annaba	On the Exponential Decay of the Reissner–Mindlin–Timoshenko System with Delay Terms (remote)
11:30 – 11:45	**Beyoud Samira**, U. STHB	Effect of Streambed Geometry on Long Waves Evolution: A Computational Approach Using a Third-Order Differential Equation (remote)
11:45 – 12:00	**Zineb Khalili**, U. Laghouat	Energy Decay for a Thermodiffusion Laminated Beam with Localized Nonlinear Damping (remote)
12:00 – 12:15	**Atmani Amel**, U. Bordj Bou Arreridj	Spatial Analyticity of Solutions for Modified KdV Equations (remote)
12:15 – 12:30	**Lamouri Boubakr**, U. Adrar	Global Behavior of a Diffusive Host-Pathogen System with Generalized Nonlinear Incidence (remote)
12:30 – 12:45	**Soufiane Benkouider**, U. Laghouat	Blow-Up in Finite Time for Variable-Source Equations (remote)
12:45 – 13:00	**Ibtissam Fekrache**, Ens Skikda	On the Exponential Stabilization of a Timoshenko System Subject to Thermo-Diffusion Effects (remote)

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Président du Comité d'Organisation
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Monday, October 27, 15:30 – 17:15,

Président du Comité d'Organisation
Pr. BOULARES Hamid

Hall 1: Probability, Statistics and Theory of Computation,

Chairman: Prof. Salah Badraoui

15:30 – 15:45	**Karima Kimouche**, U. Skikda	Parameters Estimation of a Spatio-temporal ARCH Model with Location Dependent Parameters
15:45 – 16:00	**Lilia Mahmoudi**, U. Annaba	Canard Cycles of Finite Codimension with Two Breaking Parameters
16:00 – 16:15	**Nesrine Idiou**, U. Constantine-3-	Numerical Estimation of the Extreme Value Index Under Censored Data Using an Adaptive Likelihood and Root-Finding Approach
16:15 – 16:30	**Ahlem Djebar**, U. Annaba	Generalized Markov Inequality: Extensions, Numerical Illustrations, and Multivariate Chernoff Bounds
16:30 – 16:45	**Chima Hedadji**, U. STHB	Statistical Estimation of Traffic Intensity in M/M/1 Retrial Queues with Break Probability
16:45 – 17:00	**Hiba Aiachi**, U. Batna-2-	Bayesian Inference on Traffic Intensity of M/M/1: Detailed Prior Comparison and Simulation Study
17:00 – 17:15	**Smail Yousfi**, U. Tizi Ouzou	Exploring Gene Expression Profiles Through Density-based Dimensionality Reduction Techniques

Hall 2: Stochastic calculs and Probability, Statistics,

Chairman: Prof. Assia Frioui

15:15 – 15:30	**Benchaabane Abbes**, U. Guelma	Existence Solutions of Second-Order Neutral Stochastic Differential Equations Driven by Rosenblatt Process
15:30 – 15:45	**Slimane Bouhadjar**, U. Guelma	On the Comparison Between the Divisor Function and Its Value at Euler's Phi Function
15:45 – 16:00	**Fetima Ladjimi**, U. Tizi Ouzou	On the Asymptotic Behaviour of a Class of Multi-Dimensional Markov Chains
16:00 – 16:15	**Chaabane Benatmane**, U. Skikda	Self-Switching and Threshold-Driven Lindley Distributions: Applications to Seismicity in North Occidental of Algeria (1790–2016)
16:15 – 16:30	**Aymen Leslous**, U. Guelma	Almost Periodicity of Solutions in Distribution of Second-Order Stochastic Differential Equations
16:30 – 16:45	**Aissaoui Fatima**, U. Guelma	Fractional Weighted Midpoint-Type Inequalities for s-Convex Functions
16:45 – 17:00	**Hamid Boulares**, U. Guelma	A New Technique for the Solvability of a Class of Fractional Pantograph Problems

Hall 3: Mathematical Modeling and Differential Equations,

Chairman: Dr. Abdelali Ezzebsa

15:45 – 16:00	**Abdelali Ezzebsa**, U. Guelma	Price Dynamics with Interactive Agents
16:00 – 16:15	**Mouhamed Esalih Aries**, U. Guelma	Study the Existence and Uniqueness of the Strong and Weak Solutions, and the Exponential Decay of the Petrovsky Problem
16:15 – 16:30	**Mohammed El-Arbi Khalfallah**, U. Annaba	An Extended Polynomial Exponential Model: Statistical Properties and Applications

Hall 4: Fractional calculs,

Chairman: Dr. Faycal Bouchelaghem

15:15 – 15:30	**Abdelghani Lakhdari**, ENSTI Annaba	On Fractional G-Calculus (remote)
15:30 – 15:45	**Azzouz Belqassim**, U. Rélizane	Solvability of Fractional Differential Equations Involving the $(\mathbf{k}, \Psi)$-Hilfer Derivative (remote)
15:45 – 16:00	**Korbaa Fatima Zohra**, U. Mascara	On the Fractional Derivative of Distributions (remote)
16:00 – 16:15	**Said Mekhdoua**, U. Laghouat	Solvability and Stability of a General Class of Fractional Differential Equations via the Method of Upper and Lower Solutions Coupled with Fixed-Point Theorems (remote)
16:15 – 16:30	**Farid Chabane**, U. Khemis Miliana	Existence and Ulam–Hyers Stability Theory of Variable-Order Multi-Term Φ-Caputo Fractional Boundary Value Problems via Bielecki Norm (remote)

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Tuesday, October 28, 10:30 – 12:30,

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Hall 1: Fractional calculus,

Chairman: Dr. Lilia Zenkoufi

10:30 – 10:45	**Sami Segni**, U. Guelma	Analytical and Numerical Study of Fractional Delay Differential Equations with Relaxed Lipschitz Conditions
10:45 – 11:00	**Nesrine Kamouche**, U. Annaba	Asymptotic Expansion of Laplace Integrals in the Case of Two Critical Points
11:00 – 11:15	**Lilia Zenkoufi**, U. Guelma	Solvability of a Nonlinear Hadamard Fractional Differential Equations with Integral Boundary Condition
11:15 – 11:30	**Ghoul Wissam**, U. Guelma	Stability for a Class of Fractional Stochastic Time-Delayed Systems
11:30 – 11:45	**Abdelmounaim Hamdi**, U. Sétif-1-	Regional Optimal Control Of Almeida-Caputo Fractional Bilinear Systems
11:45 – 12:00	**Nasri Nassima**, U. Skikda	Parameterized Newton Type Inequalities for Differentiable Preinvex Functions via Riemann-Liouville Integral Operators
12:00 – 12:15	**Sarra Leulmi**, U. Constantine-1-	Recursive Kernel Estimator of Regression for Functional Data
12:30 – 12:45	**Mahideb Saadia**, Ens Constantine	On Generalized Expansive Mappings and Common Fixed Point Theorems in Metric Spaces with an Application

Hall 2: ODE, Dynamics and Lie Theory,

Chairman: Dr. Saliha Djenaoui

10:30 – 10:45	**Selmani Wissame**, U. Skikda	Regularization Method for an Elliptic Problem
10:45 – 11:00	**Yousfi Abla**, U. Skikda	Study of the Phase Plane of a Discrete Dynamical System in the Plane
11:00 – 11:15	**Fernane Khaireddine**, U. Guelma	The Number of Limit Cycles Bifurcating from the Periodic Orbits of an Isochronous Center
11:15 – 11:30	**Soumya Leulmi**, U. Skikda	An Efficient Technique for Step Size Determination in Solving Optimization Problems
11:30 – 11:45	**Nabil Sellami**, U. Guelma	On the Periodic Orbits for a Class of Fifth-Order Differential Equations
11:45 – 12:00	**Anis Bouhnik**, U. Souk Ahras	Investigation of the Periodicity and Stability of Solutions for Certain Delay Functional Neutral Differential Systems
12:00 – 12:15	**Djenaoui Saliha**, U. Guelma	The Generic Limit Set of Dynamical Systems: Links with Equicontinuity
12:15 – 12:30	**Mohammed Aili**, U. STHB	Stabilization of a Viscoelastic Equation with a Nonlinear Delay (remote)
12:30 – 12:45	**Hamouda Messaadia**, U. Souk Ahras	Nouvelles Méthodes du Calcul de l'Inverse et du Déterminant d'une Matrice Carrée
13:15 – 13:30	**Ridha Dida**, U. Guelma	Analysis and Numerical Solutions of Fractional Delay Differential Equations with Mixed Caputo–Riemann–Liouville Derivatives Using Nyström Techniques

Hall 3: Fixed Point Theory and Operator Theory,

Chairman: Prof. Abbes Benchaabane

10:30 – 10:45	**Toufik Heraiz**, U. M'sila	Essential Spectrum of the Sequence of Bounded Operators via the S-v-Convergence
10:30 – 11:00	**Hamed Abderrahmane Bouraoui**, NHMS Algiers	Stability of Some Thermoelastic Systems (remote)
11:00 – 11:15	**Rabah Debbar**, U. Guelma	Some Spectral Properties of Operators Defined on Various Classes of Exotic Banach Spaces
11:15 – 11:30	**Guebbai Hamza**, U. Guelma	A Backward Finite Difference–Nyström Scheme for Linear Fredholm Integro-Differential Equations
11:30 – 11:45	**Kamel Ali Khelil**, ES-Sc. G. Annaba	Fixed point theorem for delay dynamic equations on time scale
11:45 – 12:00	**Abdellah Gherbi**, ESG2E Oran	Kaufman's Theorem for Closed Linear Relations
12:00 – 12:15	**Hadjira Lalili**, TEC. Setif	Fixed-Point Approaches for Strongly Sublinear $p(x)$-Laplacian Problem
12:15 – 12:30	**Safia Leulmi**, U. Constantine-1-	The Adaptive Recursive Kernel Estimator of the Density and Its Asymptotic Properties with Right Censored Independent Data

Hall 4: Probability, Statistics and Stochastic Calculus,

Chairman: Prof. Kamel Ali Khelil

11:00 – 11:15	**Aicha Bareche**, U. Béjaia	Impact of Large Claims on Stability Bounds of a Univariate Classical Risk Model (remote)
11:15 – 11:30	**Elbay Roumaissa**, U. Biskra	A new estimator of the cumulative hazard function under double truncated data (remote)
11:30 – 11:45	**Mehazzem Allal**, U. Mila	Connecting Schrödinger and Kolmogorov Equations: A Monte Carlo Method for Periodic Electromagnetic Potentials (remote)
11:45 – 12:00	**Boustila Ranya**, U. Constantine-1-	Nonparametric Kernel Quantile Regression Estimation for Censored Data with a Functional Regressor (remote)
12:00 – 12:15	**Isma Debbah**, U. STHB	Dependent Data: A Note on Stationarity and Ergodicity (remote)
12:15 – 12:30	**Rania Khallout**, CU. Barika	Stochastic Optimal Control in High-Dimensional Systems: Actor-Critic Methods with Risk Penalty via Relaxed DBSDEs (remote)

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Hall 1: PDE and ODE,

Chairman: Prof. Rabah Debbar

15:00 – 15:15	**Kina Abdelkrim**, U. Ghardaia	Degenerate Singularities, First Integrals, and Non-Algebraic Limit Cycles in Planar differential Systems (remote)
15:15 – 15:30	**Meriem Ladjimi**, U. Annaba	Zero-Hopf Bifurcation in a New Five-Dimensional Differential System (remote)
15:30 – 15:45	**Zineb Beghou**, U. Constantine-1-	A High-Order Unconditionally Stable Finite Difference Scheme for One-Dimensional Linear Hyperbolic Equations (remote)
15:45 – 16:00	**Nacer Mahi**, U. STHB	General Decay for the Wave Model with Nonlinear Dissipation and a Localized Memory (remote)
16:00 – 16:15	**Schehrazad Selmane**, U. STHB	Joinpoint Regression Analysis of Tuberculosis in Algeria Over Three Decades
16:15 – 16:30	**Sabrina Ralem**, U. Mostaganem	Lp-Regularity for Transmission Problems with Abstract Robin Interface Conditions in Complete Elliptic Equations (remote)
16:30 – 16:45	**Samira Zahar**, U. Béjaia	A Multiplicity Result for a Boundary Value Problem via Fixed Point Theory (remote)
16:45 – 17:00	**Safia Himri**, U. Guelma	The Inhibitory Effect of Some Organic Compounds on the Corrosion of Steel: A DFT Approach.

Hall 2: Different Topics,

Chairman: Dr. Meriem Merad

15:15 – 15:30	**Meriem Merad**, U. Guelma	New Ostrowski Type Inequalities for Differentiable Harmonically Quasi-Convex Functions via Fractional Integral
15:30 – 15:45	**Djeridi Zohra**, U. Jijel	From P-Values to Predictions: A Novel Framework for Multistage Testing and Control
15:45 – 16:00	**Ghouar Ahlem**, ES-Sc. G. Annaba	Modeling with the Modified Extension Lindley Distribution
16:00 – 16:15	**Zineb Sabbagh**, U. Boumerdès	Exponential Stability of a Flexible Marine Riser Coupled with Internal Fluid Dynamics
16:15 – 16:30	**Bachir Barrouk**, U. Souk Ahras	An Improved Version of the PRP Conjugate Gradient Method for Optimization Purposes
16:30 – 16:45	**Zineb Azouz**, U. Constantine-1-	On the Frequency of the Digits of the Largest Prime Factor of an Integer
16:45 – 17:00	**Badreddine Meftah**, U. Guelma	Some New Tempered Gronwall-Type Integral Inequalities with Applications

Hall 3: Fractional calculs,

Chairman: Dr. Narimane Aissaoui

15:15 – 15:30	**Haithem Hawari**, U. Gabes, Tunisie.	Existence of the Directional Tangent Cone to a Positive Current
15:30 – 15:45	**Meriem Boukhobza**, U. Mostaganem	The Stability of Solutions of the Fractional Optimal Control Model for the COVID-19 Epidemic in Discrete Time (remote)
15:45 – 16:00	**Amar Chidouh**, U. El Tarf	Mathematical Analysis of a Time-Delayed Viscoelastic Problem (remote)
16:00 – 16:15	**Bachouche Lotfi**, Ens Kouba	IVPs for Caputo-power Impulsive Fractional Differential Equations with non local condition (remote)
16:15 – 16:30	**Samia Youcefi**, HSCS. Sidi Bel Abbès	Existence and Uniqueness of Solutions for Fractional Differential Equations with Nonlinear Variable-Order Riemann-Liouville Derivatives and Finite Delay (remote)
16:30 – 16:45	**Souad Bounouiga**, U. M'sila	Insights into Malaria Transmission Using Fractional Models and Numerical Simulation (remote)
16:45 – 17:00	**Sarra Guechi**, U. Oum El Bouaghi	Équations Logistiques Fractionnaires et leurs Applications (remote)

Hall 4: PDE and Mathematical modelling,

Chairman: Dr. Ridha Dida

15:15 – 15:30	**Yazid Bensid**, ES-Sc. A. Tlemcen	The Effect of Stochasticity on a Model Related to Alzheimer's Disease (remote)
15:30 – 15:45	**Dilmi Mustapha**, U. M'sila	Solution of Emden-Fowler Type Differential Equations (remote)
15:45 – 16:00	**Feriel Boudersa**, U. Batna-2-	The Schrödinger–Korteweg–de Vries System in Analytic Gevrey Spaces (remote)
16:00 – 16:15	**Khireddine Houd**, U. M'sila	Mathematical Analysis of a Dynamic Frictional Contact Problem for Viscoelastic Materials with Long-Term Memory (remote)
16:15 – 16:30	**Boukhari Soumaya**, U. Bordj Bou Arreridj	A Milstein-Type Numerical Scheme for Stochastic Delay Differential Equations with Time-Dependent Delay (remote)
16:30 – 16:45	**Khaoula Aouati**, U. Mila	A Spatial Extension of the GARCH Model: Theoretical Development and Empirical Validation (remote)
16:45 – 17:00	**Farid Leulmi**, U. Constantine-1-	Improved Step-Size Strategy for Linear Programming

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Wednesday, October 29, 10:30 – 13:30,

Hall 1: Numerical Analysis and Fractional analysis,

Chairman: Dr. Romaissa Mellal

10:30 – 10:45	**Hafida Guendouz**, U. Constantine-1-	Numerical Study of Hyperbolic Equation with Deviated Boundary Conditions (remote)
10:45 – 11:00	**Abdeldjalil Remili**, U. Bordj Bou Arreridj	Numerical Method to Approximate Solutions of Stochastic Differential Equations (remote)
11:00 – 11:15	**Assia Khassani**, U. Xiangtan	Well-Posedness for the Homogeneous Ideal Magnetohydrodynamics System Using Elsässer Variables in Besov Spaces (remote)
11:15 – 11:30	**Nouha Moussaoui**, U. Sétif-1-	An Interior-Point Algorithm for Convex Quadratic Optimization Based on Modified Search Directions (remote)
11:30 – 11:45	**Hanane Kessal**, U. Ouargla	Existence Result for Evolutionary Fractional Differential Variational Inequalities (remote)
11:45 – 12:00	**Amina Khirani**, U. M'sila	Genocchi Collocation Method for Solving Integral Equations (remote)
12:00 – 12:15	**Chaima Boutiba**, U. Chlef	New Operational Matrix Based on Genocchi Polynomials for Solving Linear Fractional Differential Equations (remote)
12:15 – 12:30	**Guefassa Imane**, U. Souk Ahras	A Modified Conjugate Gradient Algorithm with Improved Descent Properties for Robust Regression Function Estimation (remote)
12:30 – 12:45	**Kamilia Chettouh**, U. Tébessa	Mathematical and Numerical Study of Stability in a Nonlinear Age-Structured Tumor Cell Population Model (remote)
12:45 – 13:00	**Meriem Barkat**, U. Bordj Bou Arreridj	On the Limit Cycles of Discontinuous Piecewise Differential Centers (remote)
13:00 – 13:15	**Chenna Nasreddine**, CU. Barika	Comparing the Extended Spectrum of Invertible and Groups-Invertible Operators (remote)
13:15 – 13:30	**Amira Hamdi**, U. Souk Ahras	New Iterative Conjugate Gradient Method for Nonlinear Unconstrained Optimization (remote)

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Hall 2: Operator theory and Topics,

Chairman: Dr. Kamila Grara

10:30 – 10:45	**Rafik Belhadef**, U. Jijel	On the Mahler Expansion of the Generalized p-Adic Gamma Function (remote)
10:45 – 11:00	**Imine Chahinez**, U. STHB	On the Symmetry Parameters of Graphs (remote)
11:00 – 11:15	**Djamila Zirem**, U. Alger-3-	Performance Evaluation of an $M^X/G/1$ Retrial Queueing System with Dual-Phase Service (remote)
11:15 – 11:30	**Mohammed Abdelmalek**, ES-Manag. Tlemcen	Some Properties of the Weighted Linearized Operator (remote)
11:30 – 11:45	**Kamel Eddine Mokhtari**, U. Sidi Bel Abbès	Some Integral Formulae on Hypersurfaces Immersed in Weighted Manifolds and Applications (remote)
11:45 – 12:00	**Mediani Mhammed**, U. Adrar	Stochastic Dynamics and Threshold Analysis of a Network-Structured SIR Epidemic Model with Saturated Treatment (remote)
12:00 – 12:15	**Hassane Bouremel**, CU. Barika	Compatibility of Single-Valued Neutrosophic Relations (remote)
12:15 – 12:30	**Walid Wannes**, U. Sohar	On the Frequency of the Digits of the Largest Prime Factor of an Integer (remote)
12:30 – 12:45	**Yahi Rachid**, U. M'sila	An Overview on (p, σ)-Absolutely Lipschitz Mappings (remote)
12:45 – 13:00	**Dyhia Fedala**, U. STHB	On the Resolution of Exponential Diophantine Equations (remote)
13:00 – 13:15	**Fatiha Bouabdallah**, Ens Laghouat	On the Stability of Weyl's Theorem Under Non-Compact Perturbations (remote)

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Hall 3: Mathematical modeling and PDE, **Chairman: Dr. Nabil Sellami**

10:30 – 10:45	**Houdeifa Melki**, U. Batna-2-	Qualitative Analysis and Global Phase Portrait of a Nonlinear Ship Rolling Model
10:45 – 11:00	**Djamel-Eddine Hettadj**, U. Rélizane	Analysis of Caputo-Type Sequential Fractional Differential Equations with Mixed Boundary Conditions (remote)
11:00 – 11:15	**Adjimi Naas**, U. STHB	Modeling Rabies Transmission Dynamics Using Fractional Calculus: A Framework for Evaluating Intervention Strategies (remote)
11:15 – 11:30	**Imane Aouina**, U. M'sila	Existence Results and Ulam Hyers Stability of Solutions in a System of n-Nonlinear Caputo q-Fractional Differential Equations (remote)
11:30 – 11:45	**Fadila Leslous**, U. Tizi Ouzou	Global Optimization of Multiplicative Nonlinear Problems via Number-Theoretic Techniques (remote)
11:45 – 12:00	**Soumia Bessafi**, U. Chlef	Mathematical Modelling of Epidemic Spread: Traveling Wave Solutions in a Diffusive SIR Model with Saturated Incidence (remote)
12:00 – 12:15	**Halima Benhbireche**, U. Ouargla	Enhancing Mathematical Modeling through Ontology-Based Mathematical Knowledge Management (remote)
12:15 – 12:30	**Fatma Zohra Daoud**, U. Tiaret	Data-Dependence and Existence Results for Fractional Impulsive Systems (remote)
12:30 – 12:45	**Djebara Sabiha**, U. Boumerdès	On the Existence and Computation of Nash Equilibria in Constrained Bi-Matrix Games with Fuzzy Random Linear Constraints (remote)
12:45 – 13:00	**Abdellah Meskine**, U. Adrar	Uniform Stability of Neutral Type Fourth-Order Vector Differential Equations with Delays (remote)
13:00 – 13:15	**Oussama Boussoufa**, U. Jijel	Poincaré-Friedrichs Type Inequalities for Broken Sobolev and Polynomial Spaces (remote)
13:15 – 13:30	**Adel Bounabab**, U. M'sila	Tensorial Representations of Positive Multilinear Operators

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Hall 4: Functional Analysis,

Chairman: Dr. Abdourazek Souahi

10:30 – 10:45	**Soumia Boukhalkhal**, U. Laghouat	Structural and Invariance Properties of Some Bloch-Type Maps (remote)
10:45 – 11:00	**Belaala Maatougui**, U. M'sila	On the Summability of the Linearization of Lipschitz Mapping (remote)
11:00 – 11:15	**Fares Bensaid**, U. Bordj Bou Arreridj	Composition Operators on Triebel–Lizorkin–Type Spaces: The Critical Case (remote)
11:15 – 11:30	**Said Bensliman**, U. Laghouat	Isometry of Skew-Symmetric Toeplitz Matrices (remote)
11:30 – 11:45	**Bellabes Zineb**, U. Rélizane	On the Uniqueness of Solutions for Kirchhoff-Type Equations Involving the Fractional Laplacian and Singular Nonlinearities (remote)
11:45 – 12:00	**Gherdaoui Abdelaziz**, U. Tiaret	Some Integral Inequalities for the Hardy–Steklov Operator for Quasi-Monotone Functions with $0 < p(x) < 1$ (remote)
12:00 – 12:15	**Bab Asma**, U. Boumerdès	Forced Oscillations in Hyperbolic-Parabolic Equations (remote)
12:15 – 12:30	**Ahlem Benmakhlouf**, U. Batna-2-	New Upper Bounds for the Numerical Radius of Some 3 $\times$3 Operator Matrices (remote)
12:30 – 12:45	**Aldjia Maatoug**, U. Laghouat	A Singular Integral Operator on Besov and Lizorkin-Triebel Spaces (remote)
12:45 – 13:00	**Bochra Gheribi**, U. M'sila	The John–Nirenberg Inequality on Homogeneous Besov Spaces (remote)
13:00 – 13:15	**Gherib Fatiha**, U. Mascara	Continuous Spectrum Classification (remote)
13:15 – 13:30	**Meriem Araour**, U. Batna-2-	Solution of Fuzzy Nonlinear Integral Equations Using a New Method Based on Fixed Point Theory

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Poster Session 1, Monday morning,

Chairman: Dr. Ghania Rebiai

Billel Gheraibia, U. Oum El Bouaghi	General Decay of Solutions for a Wave Equation of p-Laplacian Type
Fares Kamache, U. Alger-1-	Existence of Three Solutions for a Nonlinear Fractional p-Laplacian Problem via Critical Point Theory
Mohamed Lamine Saada Khelkhal, HNSTE. Skikda	Analysis of a One-Dimensional Thermo–Poroelastic Swelling Model with Finite Memory and Time Delay
Nor Elhouda Soltani, U. Annaba	Existence and Multiplicity of Solutions for Singular Fractional Elliptic Systems via the Nehari Manifold Approach
Rania Nouadri, U. Annaba	Age-Structured SEIQR Model with Migration in Multi-Patch Environments
Youssouf Bekakra, U. Khenchela	The Rothe Method for Time-Fractional Diffusion Equation: Convergence and Efficiency

Poster Session 2, Monday afternoon,

Chairman: Dr. Tarek Chiheb

Benyettou Amel, U. STHB	Construction of New LCD Cyclic Codes over Rings
Hamida Leila Achoura, U. Souk Ahras	Regularization of an Inverse Parabolic Problem with Memory via Spectral Truncation Method
Hamza Brahim Boulares, U. M'sila	Weighted Type Estimate of Fractional Integral Operators on Global Weighted Herz Spaces with Variable Exponent
Rochdi Nouadri, U. Annaba	Advances in Modeling Extreme Values through Weighted Distributions
Safia Mekhalfa, U. Annaba	Quelques Suites Conduisant à la Création de Nouveaux Polynômes 2-Orthogonaux
Zouhir Idriss Bouker, U. Oum El Bouaghi	Strong b-Metric Spaces and Some Fixed Point Results for Expansive Mappings

Poster Session 3, Tuesday morning,

Chairman: Dr. Manal Djaghout

Amel Labadla, U. Guelma	Energy Methods and Blow-up Phenomena in Parabolic Equations
Asma Bouaziz, U. Annaba	Modeling and Estimating Failure Time under Competing Risk Structures
Djaghout Manal, U. Guelma	On the Study of the Hyperbolic $p-$Bilaplacian Equation
Hayet Baiche, U. Skikda	Ostrowski's Weighted Inequalities for Hölder Continuous Functions
Issam Abdennebi, U. Bordj Bou Arreridj	Numerical Solution of Nonlinear Volterra–Fredholm Integral Equations of the Second Kind Based on Fixed-Point Scheme
Hemza Ghardaoui, U. Guelma	Semi-Analytical Analysis of Thin Plate Deflections Using the Ciebsch–Ritz Method

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