People's Democratic Republic of Algeria

Ministry of Higher Education and Scientific Research

University of 08 Mai 1945 – Guelma

Faculty of Mathematics and Computer Science and Material Sciences

Laboratory of Applied Mathematics and Modeling (LMAM)

<u>Intervention Program</u>

8th International Workshop on Applied Mathematics and Modeling "WIMAM'2024"

New Name:
« 1st International Conference Mohand Moussaoui on Applied Mathematics and Modeling »

Organized by

Laboratory of Applied Mathematics and Modeling (LMAM)

University 8 Mai 1945 Guelma

Guelma, 19-20th Nov, 2024

First Day Program

First day, 19th November 2024

08h30–09h30   Opening ceremony   Google meeting link: https://meet.google.com/wum-sirq-gih

In memory of the late Mr. Moussaoui Mohand
Presented by: Prof. Ayadi Abdelhamid

09h30–14h30   Plenary sessions   Google meeting link: https://meet.google.com/wum-sirq-gih

Plenary Sessions Program

09h30–10h30	Chairman: Prof. Hamza GUEBBAI **Pr. Greshnov Alexandr Valerevich:** Exact values of the constants in (q1,q2)-generalized triangle inequality for (q1, q2)-quasimetric spaces.
10h30–11h00	Break + Poster Session
11h00–12h00	Chairman: Prof. Ayadi Abdelhamid **Pr. Kurulay Muhamet:** Mathematical modeling of Dynamical Systems Epidemiology
12h00–13h00	Lunch Break
13h00–14h00	Chairman: Prof. Aissaoui Mohamed Zine **Pr. Nasserdine Kechkar:** Numerical methods for fractional PDEs: A State of the Art

Ordinary Sessions Program

Room 1: Integral equations, optimization, and numerical methods

<u>Chairwoman: Dr. Kaidouchi Wahida</u>
<u>Chairman: Dr. Bouchenak Ahmed</u>

14h00 – 14h15	**Meryem BENSSAAD:** Analytical And Numerical Study of New Integro-Differential Fredholm Equation
14h15 – 14h30	**Ahlem DJEBAR:** Around Of The Bivariate Buhlamann's Optimization Problem And Its Applications
14h30 – 14h45	**Allaoua MEHRI :** Estimation D'une Erreur De La Solution D'un Problème D'un Obstacle Parabolique D'un Ordre Fractionnaire Avec Terme Source Non-Linéaire
14h45 – 15h00	**Bahi Mostafa:** Approximation solution for Noncoercive Parabolic Variational in equality using multigrid methods
15h00 – 15h30	Coffee break
15h30 – 15h45	**Houria SELATNIA:** Average Sentinel for a Parabolic Equation with Incompet Data
15h45 – 16h00	**Sami SEGNI:** Nonlinear Volterra Integro-Differential Equations with Delay Terms: An Application of the Picard Iteration Method
16h00 – 16h15	**Mohamed Lamine MERIKHI :** Modélisation Avancée Du Système De Brusselator Avec Vitesses De Réaction Variables : Une Approche Fractionnaire

Room 2: Differential equations and operator theory

<u>Chairman: Prof. CHAOUI Abderrezak</u>

14h00 – 14h15	**Guebbai Hamza:** Traitement numérique du Spectre généralisé
14h15 – 14h30	**Ridha DIDA:** Efficient Numerical Method for Solving Linear Fredholm Integro-Differential Equations Using Backward Finite Difference and Nyström Techniques
14h30 – 14h45	**Hamza Brahim BOULARES:** Weak type estimate of singular integral operators on variable weak Herz-type Hardy spaces
14h45 – 15h00	**Roumaissa Khalfllaoui:** On the solution of evolution p-Laplace equation with memory term and unknown boundary Dirichlet condition
15h00 – 15h30	Coffee break
15h30 – 15h45	**Randa Chakar:** Théorème Du Point Fixe Généralisé Pour Les Contractions F-Weak En Utilisant Une Fonction
15h45 – 16h00	**Labadla Amel et Djaghout Manal:** Parabolic p-biharmonic equation with variable exponent: existence results and full discretization

Room 3: Fixed point and fractional theory

<u>Chairman: Pr. Nasserdine Kechkar</u>

14h00 – 14h15	**Bouchenak Ahmed:** Existence and Uniqueness Study of the Conformable Laplace Transform with Applications
14h15 – 14h30	**Rebiai Ghania:** URHS for Darboux problem
14h30 – 14h45	**Merchela Wassim:** The existence of solution for an operator equation on b-metric Space
14h45 – 15h00	**Kerboua Mourad:** Mild Solutions for Non Local Hybrid -Hilfer Fractional Systems: Novel Qualitative Results
15h00 – 15h30	Coffee break

Room 4: Other Topics

<u>Chairwoman: Dr. Belhireche Hanane</u>

14h00 – 14h15	**Bilel Madjour:** Theoretical Study of Decay Solution in Euler-Bernoulli Equation With a Source Term
14h15 – 14h30	**Sarra Ghomrani:** Modeling Seismic Activity: A Theoretical and Numerical Study of Nonlinear Volterra Systems
14h30 – 14h45	**Abdallah Brik:** Periodic orbits of a fourth dimensional hyperchaotic system
14h45 – 15h00	**Rabah DEBBAR:** Existence and uniqueness of solutions for the ψ - Caputo sequential fractional order neutral functional differential equations
15h00 – 15h30	Coffee break
15h30 – 15h45	**Souhil Yekhlef:** The difference between parametric and non-parametric data and how to deal with it
15h45 – 16h00	**Bahloul Tarek:** Exploring Asymptotic Properties and Growth Constraints of a Monotonically Decreasing Function

Poster Session

- **Mohamed-Salih ARISS**: An Innovative Numerical Approach for Addressing Weakly Singular Nonlinear Integro-Differential Volterra Equations.

- **Sara LABIDI**: On the decay rate for a neutral delayed porous elastic system.

- **Boutheina TAIR**: Approximation Of Higher-Order Nonlinear Volterra Integro-Differential Equations.

- **Wahida KAIDOUCHI**: The Study Of A Nonlinear Equations.

- **Nesrine KAMOUCHE**: Méthode De Laplace Pour L'estimation Asymptotique Des Intégrales De Type De Laplace Dans Le Cas Bidimensionnel.

- **Arafa Ghada**: The balanced quantile credibility estimator with dependent risk structure.

- **Imane ZOUAK**: On the Stability of a Discrete Computer Virus Model with Fractional-Order.

- **Sarra BENARAB**: The generalization of Arutyunov's theorem on (q_1, q_1)-quasimetric space.

- **Haneche NABIL**: An incommensurate fractional-order discrete-time SIR epidemic model for influenza A viruses: Bifurcation, chaos, and control.

- **Nouadri ROCHDI**: Le test de khi-deux modifiéde Nikulin-Rao-Robson (NRR).

- **Khaoula AIDI**: Different non-Bayesian estimation methods under the Exponential Generalized Log-Logistic Model.

- **Sarra BELAKHDAR**: Clinical trials subjected to Bayesian Sequential Analysis.

- **Bouaziz CHAMSEDDINE**: Zero–Hopf bifurcation of the Lotka–Volterra systems in R^3 via averaging theory of third order.

- **Bounab NOURA**: Numerical study of a two-dimensional potential flow problem with surface tension.

- **BELILI MOHAMED CHERIF**: Dynamical analysis of a discrete-time SIR epidemic model with loss of immunity

Second Day Program

Second day, 20th November 2024

Online Day

In memory of the late Mr. Moussaoui Mohand

Room 1: Integral equations, optimization and numerical methods

Ordinary session (Morning 8h00-12h00)

Chairwoman: Dr. Benssaad Meryem

Chairman: Dr. Merchela Wassim

Google meeting link: https://meet.google.com/yfx-kqdj-ygr

08h15 – 08h30	**Hanane CHINOUNE:** Method DGJIM for Solving Differential Equations of Fractional Order
08h30 – 08h45	**Imane BAZINE:** An Analytical and Numerical Approach to a Nonlinear Fredholm Integro-Differential Equation with Weak Singularities
08h45 – 09h00	**Hamza Youcef ETTOUMI:** Homogenization of Quadratic Forms
09h00 – 09h15	**Hanane BELHIRECHE:** Mixed Volterra-Fredholm Nonlinear Integral Equations with Regular Kernels
09h15 – 09h30	**Mohammed KHIRANI:** On Integral Inequalities Related to The Extended Chebyshev Functional
09h30 – 09h45	**Douha SAADI:** Solving Nonlocal Initial-Boundary Value Problems for Parabolic Integro-Differential Equations by Numerical Method
09h45 – 10h00	**Meriem ARAOUR:** On The Existence and Uniqueness of The Solution of The Logarithmic FuzzyIntegro-Differential Equation
10h00 – 10h15	**Abderrazak Mehellou:** Numerical Solution of Fredholm Integral Equations Using Legendre-Galerkin Method
10h15 – 10h30	**Sofiane BOUTARCHA:** Spectral Collocation Method for Solving Volterra Integral Equation on theHalf-Line
10h30 – 10h45	**Safia BELLABACI:** New Fractional Mask to Edge Detection Using Laplacian Method
10h45 – 11h00	**Sabrina BENHANACHI:** A New Class of Optimization Methods Based on Coefficient Conjugate Gradient
11h00 – 11h15	**Ahlem ZAARAT:** The Adaptive Method: Theory and Application
11h15 – 11h30	**Bachir DEHDA:** A New Quadratic Method to Approximate The First Order Caputo-Fabrizio Fractional Derivative
11h30 – 11h45	**Chayma BOUKOUBA:** Numerical Solutions for Multidimensional Parabolic Problems with Nonlocal Boundary Conditions
11h45 – 12h00	**Aimen DAOUDI:** Well Posedness for Viscoelastic Fourth-Order Problems with Relaxation Term Involving The Generalized Caputo Fractional Derivative

Chairwoman: Dr. HAFAIDIA Imane

Google meeting link: https://meet.google.com/yfx-kqdj-ygr

13h30 – 13h45	**Ilyes SEDKA:** Optimizing Numerical Solutions for Nonlinear Integral Equations via the T.L.D. Algorithm
13h45 – 14h00	**Hadjer ZEROUALI:** Numerical Technique for Solving Schrodinger Equation with Boundary Conditions.
14h00 – 14h15	**Somia KAMOUCHE:** Analytical and Numerical Treatment of a Specific Nonlinear Fredholm Integral Equation
14h15 – 14h30	**Yasmina Bendaas:** Numerical Study of An Infeasible Interior-Point Algorithm for Semi-Definite Optimization
14h30 – 14h45	**Chahinaz CHENOUF:** Analytical And Numerical Study of Covering Method For Hölderian Global Optimization
14h45 – 15h00	**Fares BEKHOUCHE:** The Residual Power Series Method For Solving The Time Fractional Nonlinear Reaction-Diffusion Equations

Room 2: Differential equations and operator theory

Room 2A: Ordinary session (Morning 8h00-12h00)

Chairwoman: Dr. Ghomrani Sarra

Google meeting link: https://meet.google.com/ecw-fctt-vdb

08h15 – 08h30	**Mokhtar KHASSANI:** Elliptic Differential Equation with Variable Operators Coefficients
08h30 – 08h45	**Bahlali Dounia:** Hamilton Bellman Jacobi systems in financial market problem
08h45 – 09h00	**Abdelaziz HELLAL:** Existence of Weak Solutions to Double Phase Problems with Irregular Data
09h00 – 09h15	**Amina CHAILI:** Decay Behavior of Solutions to Coupled Biharmonic Schr¨odinger Equations with Internal Fractional Damping
09h15 – 09h30	**Mouhous AMIROUCHE:** Existence Results for First-Order Boundary Value Problems
09h30 – 09h45	**Oussama KHALIDI:** Well-Posedness and Stability Result for A Timoshenko System with Thermodiffusion Effects and Time-Varying Delay Term
09h45 – 10h00	**Achref Eddine TABET:** Limit Cycles Generated from A Zero-Hopf Bifurcation in A ContinuousThree-Dimensional Differential System via Averaging Theory
10h00 – 10h15	**Meryem CHETTI:** Growth of Analytic Solutions of Linear Differential Equations with Analytic Coefficients Near A Finite Singular Point
10h15 – 10h30	**Fatima Zohra BENGHIA:** Orthogonal polynomials corresponding to polynomial Szegő measure
10h30 – 10h45	**Imad AIMENE:** Dynamic Properties of a Kirchhoff-Type Plate Equation with Damping Terms and Acoustic Control Boundary Conditions
10h45 – 11h00	**Asma BOUGHERARA:** Critical Curve for Existence of Non-Linear Elliptic System Involving Hardy Potential and Potential-Gradient Terms
11h00 – 11h15	**Meriem HAMEURLAINE:** Solving the Resulting Differential Equations for the Bianchi I Cosmological Model
11h15 – 11h30	**Ines GARTI:** Exploring Solutions to the Cauchy Problem for the Generalized Double Dispersion Equation
11h30 – 11h45	**Khadidja Aicha KADA:** Modélisation Mathématique de la Dynamique de l'Insecte Ravageur de Vignoble (Lobesia Botrana): Interactions Adultes-Juvéniles
11h45 – 12h00	**Nawal IRZI:** On The Fourth-Order Leray-Lions Problem with Indefinite Weight and Nonstandard Growth Conditions

Chairwoman: Dr. Kaidouchi Wahida

Google meeting link: https://meet.google.com/byq-dutb-ors

08h15 – 08h30	**Ishak KETTAF:** Existence of Solutions for A Second Order Problem On The Real Half-Line Via Ekeland's Variational Principle
08h30 – 08h45	**Khaoula CHABANE:** N/2-Normal Operators on Hilbert Spaces
08h45 – 09h00	**Farida MEKKAOUI:** A New Characterization of Some Classes of Operators
09h00 – 09h15	**Safa MENKAD:** The Generalized Mean Transform Of Closed Range Operators
09h15 – 09h30	**Mustapha MAADANI:** Class $A^{\#}$ In Semi-Hilbertian Space
09h30 – 09h45	**Naima MEHENAOUI:** Exponential Decay For Nonlinear Wave Equations On A Star-Shaped-Network Using Kelvin-Voigt Mechanisms
09h45 – 10h00	**Mohamed El Farouk OUNANE:** Infinitely Many Solutions for A Perturbation Of The Prescribed Q-Curvature Problem On Closed Riemannian Manifolds
10h00 – 10h15	**Abdellah MESKINE:** Stability And Boundedness of Solutions For Some Second-Order Non-Autonomous Vector Delay Differential Equations Of Neutral Type
10h15 – 10h30	**Aicha BENGUETAIB:** Nonlinear p(x)-Laplacian Elliptic Equations with Two Singularities and $L^1 Data$
10h30 – 10h45	**Imane Boudrissa:** Nonlinear diffusion model featuring the Caputo fractional derivative and its application in image processing
10h45 – 11h00	**Hakima LASSAL:** Growth of Solutions to Linear Differential Equations with [p, q]-Order
11h00 – 11h15	**Rima Chouader:** A class of Kolmogorov differential system with three hyperbolic algebraic limit cycles.
11h15 – 11h30	**Bellamouchi Chahinez:** Positive solutions results for some nonlocal elliptic problem
11h30 – 11h45	**Maatougui Belaala:** Pietsch factorization theorem for Lipschitz phi-summing operators
11h45 – 12h00	**Nadjet Bensebaa:** Analysis of a bilateral contact problem for piezoelectric material
12h00 – 12h15	**Omar Naifar:** Fractional Calculus: From Abstract Mathematics to Practical Engineering

Room 2A: Ordinary session (Afternoon 13h30-16h30)

Chairwoman: Dr. Amel Labadla and Dr. Manal Djaghout

Google meeting link: https://meet.google.com/ecw-fctt-vdb

13h30 – 13h45	**Samira LECHEHEB:** Nontrivial Solutions for Nonlinear Problem with Non-Compact Resolvent Operators
13h45 – 14h00	**Boudersa Feriel:** Local existence of solutions in anisotropic Sobolev spaces for a coupled system of generalized Kadomtsev-Petviashvili I (KP–I) equations.
14h00 – 14h15	**Bahlali Dounia:** Non trivial weak solution of nonlinear problem involving a p(x)-Laplace type operator
14h15 – 14h30	**Smina DJENNADI:** Application of a Regularization Method for Reconstructing a Stable Solution to an Inverse Backward Problem in Fractional Diffusion Equations
14h30 – 14h45	**BRAIK Abdelkader:** Existence and Asymptotic Stability of the Solution for the Timoshenko Transmission System with Distributed Delay
14h45 – 15h00	**BENTATA Fatima Ezahra**: Existence of solutions and numerical simulation for a hyperbolic Kirchhoff-type problem with a free boundary.
15h00 – 15h15	**Mansouri Mouhamed:** Theoretical Study of the Generalized Spectrum
15h15 – 15h30	**Bengrine Fatma zohra:** Existence and non-existence results with an Hardy-Leray potential

Room 3: Fixed Point and Fractional Theory

Ordinary session (Morning 8h00-12h00)

Chairman: Dr. Ilyes Sadka

Google meeting link: https://meet.google.com/qzv-xpmo-xyt

08h15 – 08h30	**Roufaida Ketfi:** The variational study of a dynamic problem with fractional derivative
08h30 – 08h45	**Soufiane Bousserhane Reda:** On the Global Non existence of a Solution for Wave Equations with Nonlinear Memory Term
08h45 – 09h00	**AIT OUALI Nadia:** A Novel Approach to Mild Solutions in Stochastic Fractional Equations
09h00 – 09h15	**Malki Zakarya:** Fractional differential equation system with random boundaries
09h15 – 09h30	**Omar ALIMERINA:** Results for the Blow-up of nonlinear wave equation with time-dependent damping
09h30 – 09h45	**Leyla Soudani:** Hybrid fractional differential equation in Banach algebra
09h45 – 10h00	**Guedim Souad:** Uniqueness and stability of Hadamard variable-order boundary value problem
10h00 – 10h15	**Boutlilis Mokhtaria:** Existence of solutions for fractional impulsive neutral stochastic functional integrodifferential equations with infinite delay
10h15 – 10h30	**Berrighi Fatma:** Exponential stability of mild solutions for impulsive functional evolution equations
10h30 – 10h45	**Abdelkader Hakim Benhana:** Existence of solutions for a class of biharmonic equation with p-Laplacian
10h45 – 11h00	**Haroun LAMRAD:** The Existence of the Solution to a Fractional Schr¨odinger Equation with Doubly Criticality
11h00 – 11h15	**Hacen Serrai:** Existence of Solutions for an Ordinary Hybrid Version of Generalized Sturm-Liouville-Langevin Equation Using alpha-varphi Contraction and Psi-Hilfer Fractional Derivative
11h15 – 11h30	**Hacene Gharout:** Isoclines et Langues d'Arnold d'un endomorphisme tridimensionnel
11h30 – 11h45	**Noreddine Rezoug:** Nonlocal second-order delay semilinear integro-differential time-varying evolution equation with convex-power condensing operators
11h45 – 12h00	**Nouikas Azeddine:** Existence of Solutions for a Boundary Value Problem of Hadamard Fractional Derivative Order Via Pseudomonotone Theory

Ordinary session (Afternoon 13h30-16h30)

Chairman: Dr. DIDA Ridha, Dr. DEBBAR Rabah

Google meeting link: https://meet.google.com/qzv-xpmo-xyt

13h30 – 13h45	**Abdelhamid Gouasmia:** Fixed Point Theorem for Systems Involving Mixed Local and Non-Local Operators
13h45 – 14h00	**Yacine Boulatiour:** A Fractional Differential System of Beam Type With Two Generalised Nonlinearities
14h00 – 14h15	**Naouel Khial:** The existence and stability of coincidence point for mappings acting from b-metric space into generalized metric space
14h15 – 14h30	**Bazine Safia:** Some fixed point theorems
14h30 – 14h45	**MEHDI SELMANI:** THE EXISTENCE OF WEAK SOLUTIONS FOR A NEW FRACTIONAL PROBLEM VIA ψ-HILFER OPERATOR
14h45 – 15h00	**BENTERKI Abdessalem:** Recent Results on Data Dependence in Partial Metric Spaces
15h00 – 15h15	**Arioui Fatima Zahra:** Fractional Stochastic differential equations

Room 4: Other Topics

Chairman: Dr. Mohamed Lamine MERIKHI.

Google meeting link: https://meet.google.com/jeh-fmqi-wkw

08h15 – 08h30	**Bennour Abdelaziz:** Solutions for a nonlocal elliptic equation with critical Sobolev exponent and singular term
08h30 – 08h45	**Djeniah Abd Elbasset:** Inference on volatility estimation with missing data: a functional data approach
08h45 – 09h00	**Khouloud Makhlouf:** Model Uncertainty Stochastic Partial Differential Equations (SPDEs) Control and Application
09h00 – 09h15	**Zineb Bellabes:** On the study of Ψ−caputo fractional impulsive differential equations involving variational approach
09h15 – 09h30	**Sara Hamaizia:** Intermittency in fractional Duffing equation
09h30 – 09h45	**Azzi Cheyma:** Étude d'un modèle de pêcherie avec stock variable
09h45 – 10h00	**Allaeddine Haddari:** Prime de crédibilité dans le cas pondéré équilibré
10h00 – 10h15	**BECHEROUL Amina:** Non-parametric estimation of stochastic differential equations driven by mixed bi-fractional Brownian motion
10h15 – 10h30	**Chahrazed Lellou:** Application de l'algorithme MCEM sur la dynamique du VIH via le modèle espace d'état à effets mixtes
10h30 – 10h45	**Chettih Nadjet:** Autoencoders-Based Feature Extraction for Random Forest Classifier
10h45 – 11h00	**Mohammed Chikouche Elias Taki Eddine:** Modeling Risk in Finance: The One-Default Mathematical Model
11h00 – 11h15	**Touati Fatima:** Étude qualitative de quelques systèmes différentiels polynomiaux
11h15 – 11h30	**Hamidi Nabil:** The operating diagram of the competition model between plasmid bearing and plasmid-free organisms in the chemostat
11h30 – 11h45	**Ouchen Imene:** Prime Bayésienne du système Bonus-malus basée sur la fréquence et le montant du sinistre
11h45 – 12h00	**Isma Debbah:** Impact of Missing Data Percentage on the Consistency of a non-parametric Gamma Estimators

Chairwoman: Dr. Kamouche Somia

Google meeting link: https://meet.google.com/onq-bvde-ryq

08h15 – 08h30	**Rachid Chergui:** Matrices de Lucas et une nouvelle théorie du codage.
08h30 – 08h45	**Saihi Ferial:** Asymptotic Normality of the Conditional Hazard Rate Function Estimator
08h45 – 09h00	**Mohamed Touati:** Some results on the existence of nodal or positive solutions for Paneitz-Branson Equations on Non-Einstein Manifolds
09h00 – 09h15	**Yfrah Abed:** Energy decay of solutions for a linear wave equation with dynamical boundary control
09h15 – 09h30	**Mechaouf Abir:** Optimal Control of Evolution Equations
09h30 – 09h45	**Abdellatif Bencherif Madani:** Homogénéisation localement périodique
09h45 – 10h00	**Saiah Seyyid Ali:** On the Cauchy problem for a weakly coupled system of semi-linear fractional σ-evolution equation with different nonlinear memory
10h00 – 10h15	**Amina Delhoum:** DNA codes from skew cyclic codes over $F_4[]/\langle^{2}-\rangle$
10h15 – 10h30	**Amroune Zahra:** On the Diophantine equation: $d(kn) = \varphi(\varphi(n))$
10h30 – 10h45	**Djadi Chahineze:** Quadrinomial-like versions for Wolstenholme and Morley congruences
10h45 – 11h00	**Sara Dridi:** Regional controllability of nonlinear cellular automata using a preimage generation algorithm
11h00 – 11h15	**Khelifa Berkane:** Stochastic Modelling of Epidemic Systems with Fractional Brownian Motion
11h15 – 11h30	**Hadjadj Houari:** Non-Markovian queue with two types of service, optional reservice, and general vacation distribution
11h30 – 11h45	**Khaoula Meansri:** New iterative modification of the conjugate gradient method for unconstrained problems
11h45 – 12h00	**IMINE Chahinez:** Vertex-distinguishing threshold of graph
12h00 – 12h15	**Abdellatif Ben Makhlouf:** Stability results for a class of proportional fractional stochastic differential equations

Room 4C: Ordinary session (Morning 8h00-12h00)

Chairwoman: Dr. Bouacida Ichrak

Google meeting link: https://meet.google.com/wyb-ubsu-ahv

08h15 – 08h30	**Merai Manel ElBatoul:** The asymptotic properties for a conditional class of kernel estimators
08h30 – 08h45	**Bernou Ismahen:** Weak law of large numbers for dependent random variables with infinite means
08h45 – 09h00	**Mohammed El Amine Riahi:** Problem of Control for Stationary Marguerre-von kàrmàn Equation Shallow shell
09h00 – 09h15	**Achour Hossemddine:** Free-boundary problem and image contour enhancement with self-similar solution
09h15 – 09h30	**Ahlem Boucherikha:** A numerical strategy for trapped waves in the β-plane
09h30 – 09h45	**Bellout Aida:** Analysis of bifurcation, chaos, and entropy in the fractional chaotic Burgers map
09h45 – 10h00	**Akermi Seif Eddine:** Modeling infectious disease incidence in Algeria: Comparative efficacy of SARIMA, NNAR, and hybrid models
10h00 – 10h15	**Adel Boucetta:** Exploring confidence bands for nonparametric relative error regression in survival analysis with functional covariables
10h15 – 10h30	**Boukhalfa Asma:** Estimation non paramétrique par la méthode des Sieves
10h30 – 10h45	**Ghorab Elhouari:** Generalized tempered ultradistributions
10h45 – 11h00	**Si Bachir Fatima:** Successive approximations for Caputo-Fabrizio fractional differential equations
11h00 – 11h15	**Boubakr Lamouri:** Analysis and dynamics of tuberculosis (TB) with vaccination and treatment
11h15 – 11h30	**Hibaterrahmane Benmessaoud:** Estimation of blocking force in stationary Herschel-Bulkley fluid regime
11h30 – 11h45	**Imane Merzougui:** Elliptic curves and their applications in cryptography
11h45 – 12h00	**MOUSSAOUI Hakim:** On Classification of Supermodules and Supermodule superalgebras

Room 4 A: Ordinary session (Afternoon 13h30-16h30)

Chairwoman: Dr. Imane Bazine

Google meeting link: https://meet.google.com/jeh-fmqi-wkw

13h30 – 13h45	**Bousseba Fatma Zohra:** A new quadratic exponential distribution with two parameters
13h45 – 14h00	**Said Bensliman**: PRODUCT OF ASYMMETRIC TOEPLITZ MATRICES
14h00 – 14h15	**Abdoun Sylia:** Investigation of full information availability in a Markovian queue with differentiated vacations
14h15 – 14h30	**Souad Bounouiga:** Analysis of the modified SIR model for infectious diseases with fractional derivatives
14h30 – 14h45	**Chougar Wissem:** Null controllability of linear heat equation with mixed boundary conditions
14h45 – 15h00	**Zineb Douara:** Analyse de la régularité d'un problème de transmission gouverné par une ´equation abstraite dans un cadre h öl d éri e n
15h00 – 15h15	**Benkhaled Radhwane:** Application du théorème de Tikhonov pour les systèmes lents-rapides `a un mo dèle ´épidémiologique
15h15 – 15h30	**Lazri Nouara:** SZL Distribution: Properties and Simulation
15h30 – 15h45	**Melouka Remil:** Discretization for a 2D-Viscoelastic Wave Equation with Acoustic Dynamic Boundary Conditions
15h45 – 16h00	**Makreloufi Abed:** On Controllability for Linear Differential Algebraic Equations
16h00 – 16h15	**Roumaissa Elbay:** The weak convergence of the smooth estimator of the distribution function under double truncation data

Room 4B: Ordinary session (Afternoon 13h30-16h30)

Chairwoman: Dr. Bazine Safia and Dr. Benarab Sarra

Google meeting link: https://meet.google.com/onq-bvde-ryq

13h30 – 13h45	**Khedidja Abba:** Optimal Control in Partially Observed McKean-Vlasov FBSDEs with Random Jumps: A Stochastic Maximum Principal Approach
13h45 – 14h00	**Samia Teghri:** Two Parameter Lindley Frailty Model: Properties, Estimation, and Application
14h00 – 14h15	**Manseur Sara :** Principe des grandes d´déviations pour la file d'attente `a serveur unique
14h15 – 14h30	**Selma Kimouche:** Non-relativistic limit for particle confined on a surface
14h30 – 14h45	**BENALI Tinhinane:** E´t ud e des ´équations différentielles abstraites complète de type elliptique provenant de modèle s physiques concrets, sur des domaines cylindriques hétérogènes dans un cadre höldérien: application au potentiel ´électrostatique
14h45 – 15h00	**Chellouf Yassamine:** Numerical solution of fractional Hopfield neural networks using reproducing kernel Hilbert space method
15h00 – 15h15	**KACIMI Bouazza:** Some Results on the Harmonicity of 1-forms
15h15 – 15h30	**Grine Razika:** Nouvelle Distribution zéro tronquée
15h30 – 15h45	**MIME Rania:**$_k$ Counter-example of Park's necessary condition of realizability over $SL_2(R[x^{\pm}, .., x^{\pm}])$
15h45 – 16h00	**Nassima Bayarassou:** Nonparametric estimation of the relative regression function for left truncated and right censored data: Methodology and Applications
16h00 – 16h15	**Sabrina Benzamouche:** Consistency of a kernel estimator of the relative error regression function for incomplete and dependent data

Chairwoman: Dr. Hanane BELHIRECHE

Google meeting link: https://meet.google.com/wyb-ubsu-ahv

13h30 – 13h45	**Abderrahmane Layati:** Nonlinear Problem with Neumann Condition
13h45 – 14h00	**Sara Youcef Achira:** Hybrid Taylor and block-pulse functions operational matrix algorithm and its application to obtain the approximate solution of stochastic Itˆo-Volterra integral equations
14h00 – 14h15	**Yahi Rachid:** Multilinear p-th power factorable operators
14h15 – 14h30	**Benzatat Rim:** Analysis of a dynamic viscoelastic problem with long-term memory
14h30 – 14h45	**Boughambouz Hamza:** On ternary fuzzy preorder
14h45 – 15h00	**Belaiza Dihia:** M/M/1 Retrial Queuing System with Negative arrivals and two types of Breakdowns
15h00 – 15h15	**Omar Elfarouk Cherifi:** A remark on the H`aje ck-Rènyi inequality and some limit theorems for a class of dependent random variables
15h15 – 15h30	**Messabihi Nafissa:** Almost complete convergence and asymptotic normality of non-parametric estimator
15h30 – 15h45	**Salima Mansouri:** Numerical study of fractional boundary value problem with a conformable fractional derivative of Caputo-Fabrizio and its fractional integral
15h45 – 16h00	**BENARBIA Narimene:** Modeling Chagas Disease Transmission: A Semigroup approach
16h00 – 16h15	**Sadji Roufaida:** Existence of solution for a Fractional Boundary Value Problem with higher fractionnal order.