The 2nd International Conference on Applied Mathematics, Modeling, and Engineering (ICAME'25)

December 12-13, 2025,

FSAC, University Hassan II of Casablanca

Laboratory of Mathematical Analysis, Algebra and Applications (LAM2A)

Conference Program

Friday December 12, 2025	
OPENING CEREMONY	
08h30-09h00	**Welcome and Registration of Participants**
09h00-09h30	**Opening ceremony of the conference**
PLENARY SESSION	
09h30-10h15	KS1: Stochastic electromechanical cardiac model **Pr. Mostafa BENDAHMANE (University of Bordeaux)** **Moderator H. LAKHBAB**
10h15-11h00	KS2 : Problèmes inverses : Aspects théoriques et approches numériques **Pr. El Hassan ESSOUFI, Hassan I University of Settat** **Moderator A. RADID**
Coffee Break	
PLENARY SESSION	
11h30-12h15	KS3: Multidisciplinary Design Optimization in Concurrent Engineering: Modeling Complexities and Date-Driven Methods **Pr. Badr ABOU EL MAJD, Mohammed V University of Rabat** **Moderator M. OUARIT**
12h15-13h00	KS4: New mathematical models for phosphate slurry using non-Newtonian incompressible fluids **Pr. Mohamed SEAID, Durham University, England** **Moderator A. BOUMAZOURH**
13h00-15h	**Break**
14h-15h	**Lunch Break**
15h-17h20	**Parallel sessions**
17h20-17h40	**Coffee break**
17h40-20h00	**Parallel sessions**

Session 1	Partial Differential Equations & Fractional Calculus and its Applications Chair: M. AFILAL, A. BOUMAZOURH, M. EL OUAARABI	
15h00-15h20	Fadil Youssef	Existence of nontrivial weak solutions for elliptic Navier problems involving the q(z)-triharmonic operator
15h20-15h40	Khaider Hassan	Existence and uniqueness of mild solution for a time fractional Keller-Segel system in Besov-Morrey spaces
15h40-16h00	Hilali Hajar	Existence and Uniqueness of Weak Solutions for a Nonlinear Fractional problem with ψ-Hilfer Derivative and Singular Terms
16h00-16h20	Talhaoui Omar	Etude de l'existence de solutions pour un probleme d'inclusion différentielle hybride de type ψ-Hilfer
16h20-16h40	El Hafiane Ayoub	Existence Results for Anisotropic Elliptic Equations with Hardy Potentials and Neumann Boundary Conditions
16h40-17h00	Idiri Mohcine	Multiplicity Results for p(x,)-Fractional Kirchhoff Problems with Logarithmic-Type Nonlinearities
17h00-17h20	Haddani Ismail	Renormalized solution on nonlinear parabolic problems in Lp(x) involving two lower order terms
17h20-17h40	**Coffee break**	
17h40-18h00	Bouaam Hind	On a class of non-local Kirchhoff-type double phase problem with variable exponents and without the Ambrosetti-Rabinowitz condition
18h00-18h20	Moujane Noureddine	Topological degree methods for a Choquard-Kirchhoff problems involving variable exponents depending on the solution gradient
18h20-18h40	Zineddaine Ghizlane	Topological Degree Methods for Existence of Solutions in Singular Double Phase Problems
18h40-19h00	Charradi Nabil	second-order viability result for Carathéodory non-Lipschitz differential inclusion in Banach spaces
19h00-19h20	Zaoui Mohamed Amine	Basic Results of Fractional Orlicz-Sobolev Spaces
19h20-19h40	El Wazna Achraf	Solutions to Fractional p(x,.)-Laplacian Problems in Fractional Sobolev Spaces with Variable Exponents

Session 2	Dynamical Systems Chair: K. HATTAF, El M. MAGRI	
15h00-15h20	Bouchra El Alami	On the well-posedness and stability for carbon nanotubes as coupled two Shear beams with frictional dampings
15h20-15h40	Mustapha El Baz	Stability and numerical analysis of a contact problem for a damped shear beam system
15h40-16h00	Hakim Habri	Epidemic spreading and global stability of a two SIR model with nonlinear incidence on complex networks
16h00-16h20	Oumaima Bouaoultaine	Fractional Mathematical Modeling and Analysis of HIV–Syphilis Coinfection
16h20-16h40	Nabil Saidi	Global dynamics of a SEIS model with nonlinear incidence functional and immigration
16h40-17h00	Achraf El Omari	Stiefel manifold interpolation for adapting parameterized dynamical systems
17h00-17h20	Khadija Zeroual	Co-Dynamique du VIH et de la Syphilis : Modélisation mathématique du comportement compétitif des deux infections à Tianjin
17h20-17h40	**Coffee break**	
17h40-18h00	Youssef Belgraoui	Ensemble Kalman filtering for parameter estimation in a stochastic SVIR model with time-varying transmission rates
18h00-18h20	Hamza Bounacer	Invariance of Stochastic Maximal Lp-Regularity under Miyadera-Voigt Perturbation
18h20-18h40	Sara Soulaimani	Dynamics of a fractional order SEIRS epidemic model with vaccination and nonlinear incidence rates
18h40-19h00	Samira Zerbib	Analytical Results for Semilinear Fractional Evolution Systems with Variable-Order φ-Caputo Derivatives Using Generalized Laplace Transforms,
19h00-19h20	Moutalibi Chaima	A Fractional Order Host-Parasite Model with Diffusion: Dynamics and Numerical Analysis

Session 3	Biomathematics Chair: B. AYLAJ, M. BENDAHMANE, M. EL MAGHRI,	
15h00-15h20	Adenane Rim	A Reproducible Approach to Bifurcation Analysis in Epidemiological Models
15h20-15h40	Hamza Toufga	Data-Driven Modeling of Imported Malaria in Morocco and the Impact of Population Migration
15h40-16h00	Abdelaziz Naiddaoud	Examining Epidemic Dynamics Stochastically with a Two-Threshold Control Strategy
16h00-16h20	Difaa Youssef	The Role of Invasive Species in Shaping Nonlocal Ecosystem Dynamics
16h20-16h40	Taki Khaoula	A study of stochastic epidemic model with Ornstein-Uhlenbeck process
16h40-17h00	El-Asri El-Houssaïne	Spectral Chebyshev method and high-order continuation for solving nonlinear bioheat transfer problems in two-dimensional skin tissues
17h00-17h20	Maaqoul Salaheddine	Numerical solutions of a reaction diffusion equation using time splitting methods and application to population dynamics
17h20-17h40	**Coffee break**	
17h40-18h00	Mohamed Ladib	The impact of the higher-order forward contact tracing on the spread of epidemics
18h00-18h20	Khalid Errami	A delayed SIR model for assessing contact tracing influence on epidemic dynamics
18h20-18h40	Lagzini Abdelati	Inference of the Basic Reproduction Number R_0 for Partially Observed Stochastic SIR Epidemic Models
18h40-19h00	Bouziane Soukaïna	Dynamics of one prey-two predators system with competition and incorporating the Hattaf-Yousfi functional response
19h00-19h20	Siham Hachoum	Effects of Latency and Incubation Periods on the Dynamics of Plant Epidemics
19h20-19h40	Malek Rajae	The Characteristic Finite Element Method for Chemotactic Behavior in the Keller-Segel Model: Mathematical Analysis and Numerical Computations
19h40-20h	Karimine Abdelatif	Dynamical Analysis of a Stochastic Epidemic Model Driven by Lévy Jumps

Session 4	Harmonic Analysis Chair: A. AKHLIDJ, F. EL WASSOULI, I. MARRHICH	
15h00-15h20	El Bouazizi Mohammed	Generalized Uncertainty Principles Associated with the Quadratic-phase Fourier integral transform
15h20-15h40	Khadari Abdelmajid	Integrability of the generalized Fourier transforms
15h40-16h00	Elgadiri Fatima	Some qualitative uncertainty principles for the Fractional Dunkl Transform
16h00-16h20	Skidi Abdessalam	Weighted integrability results for modified Whittaker transform
16h20-16h40	Benlaajine Hassan	Approximation of functions in Fourier-Dunkl discrete harmonic analysis
16h40-17h00	Abdessalam Chablaoui	A new orthogonality relation for complex Laguerre polynomials via canonical Bessel heat transform
17h00-17h20	Mohamed LAAMRI	On the Extension of Abilov and Titchmarsh-Type Results to the Generalized Fourier-Bessel Transform
17h20-17h40	**Coffee break**	
17h40-18h00	Noureddine NAFIE	Continuous wavelet transform associated with the multidimensional Bessel operator
18h00-18h20	El Amrani Slimane	A Study of Homoderivations in 3-Prime Near-Rings with Centralizing Constraints
18h20-18h40	Laamimi Afaf	An inversion theorem for the generalized Fourier-Bessel transform
18h40-19h00	El Hyat Abdellah	Dini-Lipschitz functions for the quaternion linear canonical transform
19h00-19h20	Lahmadi Hasnaa	On the algebraic structure of Mehler-Fock-Clifford convolution and applications

Session 5	Neural Networks Chair : El H. ESSOUFI, H. LAKHBAB, K. RHOFIR	
15h00-15h20	Roussafi Mariam	A Comparative Study of Numerical Methods and DeepONet for Air Pollution Modeling
15h20-15h40	El Aoung Ahmed	Using Machine Learning Methods to Predict Orientation Toward Literary Streams
15h40-16h00	Su Jianzhong	Brain Pattern Analysis Using Novel PDE Inverse Problem for EEG Source Localization Methods
16h00-16h20	Tamim Soukaina	Invertible Neural Networks for Matrix Factorization in Recommender Systems
16h20-16h40	Hariri Imane	Learning forward and inverse dynamics of nonlinear complex-valued partial differential equations using Kolmogorov-Arnold networks
16h40-17h00	Hafid Meryem	Neural Approaches to Software Security with Assembly-Based Control Flow Graphs
17h00-17h20	El Alami Anass Abdelhamid	Secure Collaborative Intrusion Detection: Federated Learning with Normalizing Flow-Based Data Augmentation
17h20-17h40	**Coffee break**	
17h40-18h00	Elkaf Mariem	Analytical Study of Tobacco Consumption Dynamics
18h00-18h20	Moutaouakkil Jamal	A Neural Network Approach for Delay Differential Equations with Multiple Delays
18h20-18h40	Hamza Aguedjig	Mathematical Model of tumor spheroid with FUCCI and PINN
18h40-19h00	Mohammed EL HAMMANI	Mathematical and Numerical Analysis of Chemotherapy Resistance in Tumors: Modeling Integrating Darwinian, Lamarckian, and Microvesicle-Mediated Mechanisms with the WENO5 Scheme

Session 6	Computing in Mathematics Chair: A. AZOUANI, M. LHOUS, M. OUARIT	
15h00-15h20	Aslaoui Samah	Spectral Analysis of a Phase Space Localization Operator via Negative Binomial States
15h20-15h40	El Moujaddid Soumia	Monkeypox disease with saturated incidence rates: Mathematical analysis
15h40-16h00	Chnigli Mohamed	Numerical and Variational Approaches to Electroelastic Contact Problems
16h00-16h20	Maaqoul Salaheddine	Numerical solutions of a reaction diffusion equation using time splitting methods and application to population dynamics
16h20-16h40	Boubekraoui Maryam	Generalized Krylov Subspace Methods for Efficient Multilinear PageRank Computation
16h40-17h00	Rhouni Omar	On approaches for computing multivariate interpolation polynomials
17h00-17h20	Lahrache Manar	Numerical Simulation of a Bead-Type Thermistor Problem with Anisotropic p-Laplacian Diffusion
17h20-17h40	**Coffee Break**	
17h40-18h00	Afdifid Youssef	Approximate Controllability of Fractional Evolution Equations in Hilbert Spaces via Resolvent Operators
18h00-18h20	El habib Banouisse	Existence and Stability Analysis Using Fixed Point Theorems for a Class of Nonlinear ψ-Caputo Fractional Differential Equations
18h20-18h40	Bariki Fatima Zahra	Numerical Study of a Thermoelastic Laminated Beam System with Microtemperature Effects
18h40-19h00	Oufkir Khadija	Green's Function Method for Solving Fractional Differential Equations with ψ -Caputo Derivative
19h00-19h20	Kraita Abderrahim	Existence and auxiliary results for hybrid fractional differential equations

SATURDAY December 13, 2025	
PLENARY SESSION	
	PLENARY SESSION **Webinar link :**
09h00-09h45	KS5: Long-time behavior of a coupled system modeling a one-dimensional degenerate plate with piers **Pr. Abdelaziz SOUFYANE, University of Sharjah, United Arab Emirates** **Moderator M. EL OUAARABI**
09h45-10h30	KS6: Strong and Fast convergences of primal-dual dynamical systems with time scaling and Tikhonov regularization coefficients **Pr. Hassan RIAHI, Cadi Ayyad University, Marrakech** **Moderator M. EL MAGHRI**
10h30-11h00	**Coffee Break**
PLENARY SESSION	
11h00-11h45	KS7: Modeling the spread of infectious diseases in urban areas via public transportation **Pr. Abdessamad Tridane, United Arab Emirates University** **Moderator M. LHOUS**
11h45-13h05	**Parallel Sessions**
Lunch	
13h05-14h30	**Lunch Break**
14h30-16h50	**Parallel Sessions**
16h50-17h10	**Coffee Break**
17h10-18h30	**Parallel Sessions**
18h30-19h30	Round Table

Session 1	Partial Differential Equations & Fractional Calculus and its Applications Chair: M. AFILAL, A. BOUMAZOURH & M. EL OUAARABI	
11h45-12h05	Moujani Hasna	Existence results for logarithmic double phase elliptic equations with convection terms in variable exponent Musielak-Orlicz-Sobolev spaces
12h05-12h25	Benhadda Walid	On Implicit φ-Hilfer Fractional Differential Equations with the p-Laplacian Operator
12h25-12h45	Alfioun Jamal	On Nonlinear Schrödinger-Kirchhoff Equations with Double Phase Operator and Convection Effects
12h45-13h05	Talha Abdeslam	Non-Coercive Elliptic Problems with Measure Data in Musielak-Orlicz Spaces
Lunch		
14h30-14h50	Mejjate Mohamad	On a Degenerate Navier Problem involving the Weighted Biharmonic Operator
14h50-15h10	Sabiry Abdelaziz	Entropy solution for γ(x)-triharmonic equation involving Navier boundary conditions and Hardy potential
15h10-15h30	Moufid Omar	Espaces d'Orlicz-Sobolev fractionnaires et Applications
15h50-16h10	El-Yahyaoui Houria	Robin type boundary conditions in generalized fractional sobolev spaces
16h10-16h30	Halimi Meryem	Some results for double phase problems with double degenerate coercivity
16h30-16h50	Benkhalou Hayat	Existence and Uniqueness of Renormalized Solutions for a p(x)-Elliptic Non-Coercive Problem Under Neumann Boundary Conditions
16h50-17h10	**Coffee break**	
17h10-17h30	Oubaha Aicha	Existence results for bi-nonlocal fourth-order r(z)-Kirchhoff problems involving Leray -Lions type operators
17h30-17h50	Hamani Soufiane	Mathematical model of Alzheimer's disease
17h50-18h00	Sabrari Hamid	Théorème arithmétique dynamique
18h00-18h20	Salma Khan	Translation surfaces generated by two lines of curvature lying on a regular surface in Euclidean 3-space
18h20-18h40	Mouad Allalou	On a Class of Nonlinear Convolution-Type Problems via Topological Degree Method

Session 2	Numerical Analysis Chair: B. AYLAJ, M. BENDAHMANE, H. RAHNAOUI, K. RHOFIR	
11h45-12h05	Ait Ichou Mohamed	A Generalized Fractional Zener Model with Fractional-Order Optimization for Accurate Quality Factor Q Approximation
12h05-12h25	Baroudi Sami	Accurate Non-Uniform Grid Schemes for Singular Time-Fractional Integro-Differential Equations
12h25-12h45	Kharbaoui Yassine	Coupled Meshless and Domain Decomposition Techniques for Robust Boundary Condition Enforcement in Linear Elasticity
12h45-13h05	El Moutaouakil Hicham	Numerical Analysis of the Bidomain Equations for Cardiac Wave Propagation
Lunch		
14h30-14h50	Chaher Mohamed	Numerical solution of singularly perturbed convection-diffusion problem using cubic B-spline quasi-interpolation method.
14h50-15h10	Ed-Dahbi Kaoutar	Numerical study of instabilities in two-dimensional structures using a high-order meshfree approach.
15h10-15h30	Malek Mustapha	Solution of anisotropic diffusion problem in functionally graded material using generalized finite element method
15h50-16h10	Dell'Accio Francesco	On the localization of the multinode Shepard interpolation formula
16h10-16h30	Di Tommaso Filomena	Interpolation of scattered data on the sphere by multinode Shepard operators
16h30-16h50	Mohammed BAATI	Numerical approximation of the one-dimensional inverse Stefan problem using a method of fundamental solutions
16h50-17h10	**Coffee break**	
17h10-17h30	Fadil Rajaa	Using WLS for incompressible fluid flow simulations
17h30-17h50	ZINEB AATRIF	Divide and Conquer Method for the Sylvester Tensor equation
17h50-18h10	Chakir Soukaina	Singularity Formation in the Keller-Segel Model: Theoretical Analysis and Numerical Testing Using the delta-Ziti Method
18h10-18h30	El Bilali Mohammed	Further Results on the Weak m-WG Inverse
18h30-18h50	Slimani Omaima	A New Analytical Framework for Discrete-Time SIS Models with Nonlinear Recruitment

Session 3	Control Theory and Applications Chair: M. LHOUS, El M. MAGRI, A. TRIDANE	
11h45-12h05	Amissi Chadi	Domination in linear time-varying systems
12h05-12h25	Khaloufi Issam	Exact and Weak Disturbance Rejection in Localized Continuous Linear Systems
12h25-12h45	El Hajhouj Samir	Optimal control of a new class of bilinear systems
12h45-13h05	Bengrich Mohammed	Optimal control for bilinear systems with delay
13h30-14h30	**Lunch**	
14h30-14h50	Miassangana Drech Vusconty	Exact controllability of non-autonomous semilinear systems with an unbounded operator in infinite dimension
14h50-15h10	Elouafi Mohamed	Remediability problem for a semilinear distributed dynamical systems
15h10-15h30	Sakkoum Ayoub	Enhancing Blood Glucose Control Through the Fixed Point Theorem
15h50-16h10	Hizazi Hiba	A set-valued approach applied to a control problem of cancer
16h10-16h30	Sahib Issam	Dynamics and Control Strategies of Measles: A Mathematical Approach
16h30-16h50	Chahid Wafae	Mathematical Modeling of containing a rumor via counter-rumor
16h50-17h10	**Coffee break**	
17h10-17h30	Oubouskour Khadija	Dynamical Modeling and Optimal Control Strategies to Limit Leishmaniasis reservoir and spread
17h30-17h50	Dani Mohamed	Parametric shape optimization problem on a non-linear model with a numerical simulation
17h50-18h10	Jaber Tawfik	Gradient Optimal Control of an Infinite Dimensional Bilinear System Using Bounded Distributed Controls
18h10-18h30	Hamza Toufga	Data-Driven of discret model in time and space for study seasonal variations in fasciolosis in Morocco and application of optimal control
18h30-18h50	Abdelaziz Naiddaoud	Examining Epidemic Dynamics Stochastically with a Two-Threshold Control Strategy
18h50-19h10	Mohamed BAROUDI	Mathematical Modeling and Optimal Control of the Mpox Disease

Session 4	Optimization and Convex Analysis Chair : B. ABOU EL MAJD, M. EL MAGHRI, H. RIAHI	
11h45-12h05	Battahi Fouad	Fast rates and strong convergence towards the minimum norm solution of dynamic trajectories with Tikhonov regularization for convex minimization under linear constraints
12h05-12h25	El Haddaji Ayoub	Numerical Solution of Dynamic Financial Models Using Proximal Gradient Methods
12h25-12h45	Amrani Zerrifi Imad	p-Hyperconvex Functions: Denition and Key Foundational Properties
12h45-13h05	Ilham Ouelddris	Logarithmic Convexity and impulse Approximate Controllability for Degenerate Parabolic Equations with Robin Boundary Conditions
13h30-14h30	**Lunch**	
14h30-14h50	Nafnaf Youssef	Some characterizations of bounded-E^a operators and applications
14h50-15h10	Haddou Sellak	ε-OPTIMALITY IN REVERSE OPTIMIZATION
15h10-15h30	Mazgouri Zakaria	Solving Non-Monotone Inclusions with an Inertial Proximal Method Using Warped Resolvents
15h50-16h10	Ait Brik Asmaa	IPS for Degenerate Linear Programs.
16h10-16h30	Houssa Nouhaila	Comparative Study of Logistic Regression and Random Forest for Prostate Cancer Classification
16h30-16h50	Yassir Tariq	CONCAVE MINIMIZATION FOR MULTI-LABEL CLASSIFICATION
16h50-17h10	**Coffee break**	
17h10-17h30	Gadhi Nazih	KKT-Type Conditions for Multiobjective Bilevel Optimization via Tangential Subdifferentials

Session 5	Modeling and Engineering Chair: M. OUARIT, A. RADID	
11h45-12h05	Ouahla Abdelhamid	A numerical approach to modeling the effects of surface texture and cavitation on periodic squeeze films
12h05-12h25	Sakhi Hasnae	Contextual Lemmatization Meets Dialect Normalization: Scaling MSA Models Across Arabic Varieties
12h25-12h45	Serrar Abderrahim	Flow Separation over a Backward-Facing Ramp with and without a Fluidic Oscillator Actuator
12h45-13h05	Ameur Meryem	Fuzzy Markovian Image Segmentation
13h30-14h30	**Lunch**	
14h30-14h50	El Aoudi Abdelaziz	Numerical analysis and multiphysics modeling of 3D printing of bimetallic structures
14h50-15h10	Kardoudi Mohammed	Numerical performance comparison of finite and infinite MHD journal bearings
15h10-15h30	Boussakssou Mohamed	A Mathematical-Computational Approach to Modeling Annotator Disagreement in Offensive Language Detection
15h30-15h50	Boulahia Zoubair	Finite Volume Analysis of Free Convection Heat Transfer in a Square Enclosure Filled by a Cu-Water Nanofluid Containing Different Shapes of Heating Cylinder
15h50-16h10	Arhandou Amine	Towards Intelligent Subdivision: A Survey of Classical and AI-Driven Schemes for Geometric Modeling
16h10-16h30	Benlkhaila Mohammed	Theoretical Analysis and Modeling of Asymptotic Behavior in Markets with Gaussian Drift and Randomly Occurring Expert Opinions
16h30-16h50	Cherkaoui Fatima	Dynamic analysis of fractional order SEQIR epidemic model with nonlinear incidence rate and application to COVID-19 pandemic in Morocco and Italy
16h50-17h10	**Coffee break**	
17h10-17h30	Babrhou Yassine	Dynamics of a Fractional Spatio-Temporal Model for Vaccination Strategies
17h30-17h50	Hatime Naoufel	Existence Results for Nonlinear ψ-Caputo Cauchy Problems through Integro-Differential Analysis
17h50-18h10	Elkhettab Ahlam	Mathematical model of kidney disease under the impact of diabetes and hypertension
18h10-18h30	Essefiani Oumaima	Estimation Approach for a Linear Quantile-Regression Model with Long-Memory Stationary GARMA Errors
18h30-18h50	SMOUK Ali	Numerical approximation of thermoelastic Timoshenko systems with second sound based on a unified stability number

Session 6	Computing in Mathematics, Operational Research Chair: S. ABDELALIM, B. CHERGUI, A. EL KHALFI, H. LAKHBAB	
11h45-12h05	Eddaoudi Fakhita	An intelligent Simulated Annealing Algorithm using Neural Networks for Solving the Traveling Salesman Problem
12h05-12h25	Manar Fahim	Hybrid Genetic Algorithm with Deep Q-Learning Mutation for Enhanced Vehicle Routing Optimization
12h25-12h45	Semami Soukaina	Improved Formulation and a Novel Resolution Approach for the Close Enough Traveling Salesman Problem
12h45-13h05	Laamim Ayoub	Solving Large-Scale Maximum Flow Problems with a Modified Simulated Annealing Algorithm
13h30-14h30	**Lunch**	
14h30-14h50	Heider Ghazouani	A new improved Particle Swarm Optimization for permutation problem
14h50-15h10	Souktani Imane	On the classes of k-spectrally monomorphic two-graphs
15h10-15h30	Chiboub Abdelhakim	Spectral condition for expandability into a doubly regular tournament
15h30-15h50	Soukaina Lamsifer	An improvement of the lower bound for the minimum number of link colorings by quandles
15h50-16h10	Lkoaiza Abdelkarim	Hashing with Expander Walks on Cayley Graphs
16h10-16h30	Cherkaoui Asmaa	Parallelizable Post-Quantum Hashing from Constacyclic Codes over R = Fq +uFq +vFq +uvFq
16h30-16h50	Lechhab Hajar	Spectral properties of some graph classes
16h50-17h10	**Coffee break**	
17h10-17h30	Essofi Mohamed	Numerical and Analytical Investigation of Contact Problems with Friction in Thermo-viscoelasticity
17h30-17h50	Belaid LKAIHAL	Mathematical Study of a Thermo-Viscoelastic Contact Problem Involving a Hemivariational Inequality
17h50-18h10	Janati Mohamed	Analyse des vibrations non linéaires de grandes amplitudes dans les poutres encastrées aux deux extrémités
18h10-18h30	Sarir Zaineb	On the Quasi-Orthogonal Extension