

Abdelhamid ibn Badis University - Mostaganem
Faculty of Exact Sciences and Computer Science
Under the patronage of the Rector of the University of
Mostaganem
Professor BOUDERAH Brahim

National Symposium on Innovative Mathematics: Retrospective and Perspectives

Discover New Perspectives and Pioneering Approaches in the Field of Innovative Mathematics and Their Applications.



Honorary Presidents

Prof. BOUDERAH Brahim
Rector of the University of Mostaganem
Prof. AMIR Abdessamed
Dean of the Faculty of Exact Sciences and
Computer Science

Conference Office

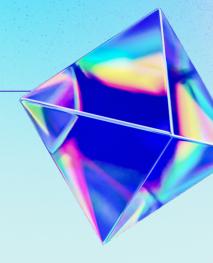
THE CAMPUS OF THE FACULTY OF EXACT SCIENCES AND COMPUTER SCIENCE.

11-12 th DECEMBER, 2024

CONFERENCE cordinators

Dr. BOUADJEMI Abdelkader
Dr. MOHAMMEDI Mustapha
Dr. BOUANANI Oussama







Symposium National sur les Mathématiques Innovantes: Rétrospective et Perspectives " Conférence Hybride "

11-12 déc. 2024 Mostaganem (Algérie)

First Day: Wednesday, 11th December 2024

HALL: Auditorium

| 08:30-09:30 | Registration |
|-------------|---|
| 09:30-09:35 | Recitation from the Holy Quran |
| 09:35-09:40 | National Anthem |
| 09:40-09:45 | Opening Address by the Rector of University Abdelhamid Ibn Badis of Mostaganem |
| | Prof. BOUDERAH Brahim |
| 09:45-09:50 | Opening Address by the Dean of the Faculty of Exact Sciences and Computer Science |
| | Prof. AMIR Abdessamad |
| 09:50-09:55 | Opening Address by the President of the SNMI 2024 Conference |
| | Dr. BOUADJEMI Abdelkader |

First Day: Wednesday, 11th December 2024

HALL: Auditorium

| | Plenary Session |
|--------------|--|
| | Speaker: Prof. Hafid Aourag Mohamed Boudiaf University |
| 10:00 -10:35 | of Oran |
| 10.00 10.33 | "Devons-nous rechercher le progrès ou l'innovation en |
| | mathématiques? " |
| | |
| | Chair: Prof. AMIR Abdessamad |
| | Speaker: Prof. Mouffak Benchohra |
| 10:35 -11:10 | Djillali Liabes University of Sidi Bel Abbes |
| | Chair: Prof. Berrabah Bendoukha |
| 11:10-11:25 | Coffee Break |
| | Speaker: Prof. Seddik Ouakkas |
| 11:25-12:00 | University Of Saida |
| | Chair: Prof. Lakehal Belarbi |
| | Speaker: Prof. Belaidi Benharrat |
| 12:00-12:35 | University Of Mostaganem |
| | Chair: Prof. Mouffak Benchohra |
| 12:35-14:00 | Lunch |
| | Speaker: Prof. Salim Bouzebda |
| 14:00-14:40 | University of Technology of Compiègne |
| 14.00 14.40 | (UTC- France) |
| | Chair: Prof. Djillali BOUAGADA |
| | Google Meet Link: https://meet.google.com/ |

SESSION: 1 HALL: Auditorium

Chair: Prof. Bouagada Djillali

| Oral Presentation: In-Person Mode | | |
|-----------------------------------|-------------------------|---|
| | Speakers | Presentation Titles |
| 14:45–15:00 | Bilal Abbad | Exponential Decay and Well-Posedness for a One-Dimensional Porous-Elastic System with Distributed Delay |
| 15:00–15:15 | Abdelnebi Amira | Numerical Advances: A Hybrid Approach for Solving Fractional Linear Boundary ValueProblems (FLBVPS) |
| 15:15–15:30 | Fatma Berrighi | Controllability of Mild Solutions in Second-Order Impulsive Evolution Equations |
| 15:30–15:45 | Benamar Mohammed Nadjib | Admissibility Analysis and Synthesis of 2D Singular Systems Using a Strict LMI Approach |
| 15:45–16:00 | Bouchelaghem Fairouz | On the solvability of fourth-order boundary value problem with accretive operators |

SESSION: 2 HALL: S1

Chair: Dr. TABAHRIT Louiza

| Oral Presentation: In-Person Mode | | |
|-----------------------------------|----------------------------------|--|
| | Speakers | Presentation Titles |
| 14:45–15:00 | Bennour Abdelaziz | Solutions for a Fractional Equation with Critical Sobolev Exponent and Singular Term |
| 15:00–15:15 | Bouziane Aboubaker El- Saddik | On a Certain Class of Singular Fractional Caputo-Differential Problems Via Fixed PointTechnique |
| 15:15–15:30 | Anouar Laidani | Modelling of a PMSG wind turbine system using park's transformation |
| 15:30–15:45 | Hafssa Yfrah | Solving Random Fractional Differential Equations and Their Stochastic Solutions in Statistical Physics |
| 15:45–16:00 | Kerim Hanaa | SOME FIXED POINT RESULTS VIA A NEW SPACE: MODULAR FUZZY METRIC SPACE |

SESSION: 3 HALL: S2

Chair: Dr. DJOURDEM Habib

| | Oral Presentation: In-Person Mode | |
|-------------|-----------------------------------|--|
| | Speakers | Presentation Titles |
| 14:45–15:00 | Nasli Bakir Aissa | Operators that attain their norms on Hilbert spaces |
| 15:00–15:15 | Sidhoumi Noura | Resolutions on four-dimensional Lorentzian manifolds admitting a parallel null vector field |
| 15:15–15:30 | Kainane Mezadek Mourad | Semilinear σ -evolution models with friction and visco-elastic type damping |
| 15:30–15:45 | Saidani Mansouria | New Results on the $[p, q]$ -Order of Meromorphic Solutions of Linear Differential Equations |
| 15:45–16:00 | Tahar Mezeddek Mohamed | Square roots of unitriangular matrices. |

SESSION: 4 HALL: S3

Chair: Prof. Ouakkas Seddik

| Oral Presentation: In-Person Mode | | |
|-----------------------------------|----------------------|--|
| | Speakers | Presentation Titles |
| 14:45–15:00 | Derkaoui Khadidja | Geometry of the magnetic structure |
| 15:00–15:15 | Rezazgui Amina Zahra | COMMON FIXED POINT RESULTS IN THE FRAME OF AN EXTENDED QUASI B- METRIC SPACE |
| 15:15–15:30 | Zagane Abderrahim | Champs de Vecteurs Harmonniques sur le Fibre Tangent Equipé de la métrique de Sasakid Eformée |
| 15:30–15:45 | Belarbi Mansour | LINEAR BIHARMONIC MAPS IN 3-DIMENSIONAL GENERALIZED SYMMETRIC SPACES |
| 15:45–16:00 | Hamza Benachour | On the minimal translation surfaces in Minkowski 3-space with density |

SESSION: 4 HALL: S3

Chair: Prof. Dahmani Zoubir

| Oral Presentation: In-Person Mode | | |
|-----------------------------------|---------------------|--|
| | Speakers | Presentation Titles |
| 14:45–15:00 | Mekki Sanaa Dounya | QUANTILE REGRESSION OF A SINGLE FUNCTIONAL INDEX FOR FUNCTIONAL DATA WITH RANDOM MISSING DATA |
| 15:00–15:15 | Belhadji Lamia | The Contact Process with an Asymptomatic State |
| 15:15–15:30 | Arioui Fatima Zahra | Riemann-Liouville Fractional Stochastic Integro-Differential Equations with Delay |
| 15:30–15:45 | Becheroul Amina | ASYMPTOTIC ANALYSIS OF TREND FOR STOCHASTIC DIFFERENTIAL EQUATIONS DRIVEN BY SUB- FRACTIONAL BROWNIAN MOTION |
| 15:45–16:00 | Debbah Isma | Nonparametric Regression Estimation with Missing Data |

SESSION: 6 HALL: S4

Chair: Dr. DJILALI Laïd

| Oral Presentation: In-Person Mode | | |
|-----------------------------------|-----------------------|--|
| | Speakers | Presentation Titles |
| 14:45–15:00 | Garici Tarek | SUR UNE EQUATION DIOPHANTIENNE DE TYPE RESULTANT |
| 15:00–15:15 | Boubekeur Maroua Amel | Impact of Obesity on COVID-19 Transmission: A Mathematical Modeling Approach |
| 15:15–15:30 | Kamel Benyettou | A New Positivity Condition of Fractional Fornasini-Marchesini Models Using theNon-Conformable Derivative |
| 15:30–15:45 | Nadira Abbassa | Innovative Jacobi Multi-Wavelets Method to solve A linear variational Calculus Problem |
| 15:45–16:00 | Houari Nourredine | ON NONTRIVIAL SOLVABILITY OF A SIXTH ORDER INTEGRO-MULTI- POINT BVP |

SESSION: 7 HALL: S5

Chair: Dr. ANDASMAS Maamar

| Oral Presentation: In-Person Mode | | |
|-----------------------------------|-----------------------|--|
| | Speakers | Presentation Titles |
| 14:45–15:00 | Rouan Serik Mehdi | Artificial Intelligence Technics for the Unicost Set Covering Problem |
| 15:00–15:15 | Della Krachai Mohamed | Développement Mathématique de la Commande Prédictive (MPC) Appliquée à un Convertisseur Vateur DC-DC |
| 15:15–15:30 | Asma Gafour | ON BARRIER METHODS FOR STOCHASTIC PROGRAMMING |
| 15:30–15:45 | Kadda Chergui | Modélisation Simulation et Contrôle d'un Microréseau Électrique Autonome |
| 15:45–16:00 | Zelmat Souheyla | Optimal Control and the Power of Nonsmooth Newton Optimization |



Symposium National sur les Mathématiques Innovantes: Rétrospective et Perspectives " Conférence Hybride "

11-12 déc. 2024 Mostaganem (Algérie)

Conference Program (online)

SESSION: 1 HALL: 1

Google Meet Link: https://meet.google.com/ Chair: Dr.Lamia Belhadji

| Oral Presentation: In-Person Mode | | |
|-----------------------------------|-----------------------|---|
| | Speakers | Presentation Titles |
| 09:00-09:15 | Boudjelda Souhaib | ASSET ALLOCATION IN THE MEAN-VARIANCE MODEL WITH RISKY ASSETS AND A RISK-FREE ASSET |
| 09:15-09:30 | Madiha Tour | A modified champernowne transformation to improve boundary effect in kernel distribution estimation |
| 09:30-09:45 | Mohamed Amine Mezerdi | APPROXIMATION OF RELAXED CONTROL PROBLEMS OF MCKEAN-VLASOV SDE |
| 09:45–10:00 | Oum elkheir Benaouda | Asymptotic Normality of a Nonparametric Estimator of the Conditional Density Function for Functional Data |
| 10:00-10:15 | FERIAL SAIHI | ASYMPTOTIC NORMALITY OF KERNEL ESTIMATORS BASED UPON INCOMPLETE DATA |
| 10:15–10:30 | Khemissi Zahia | ESTIMATION OF FRECHET PARAMETERS USING A WEIGHT FUNCTION |

Google Meet Link: https://meet.google.com/

SESSION: 1 HALL: 2 Chair: Dr.Lamia Belhadji

| | Oral Presentation: In-Person Mode | | |
|-------------|-----------------------------------|---|--|
| | Speakers | Presentation Titles | |
| 10:45-11:00 | Fatih Chellai | Hierarchical Bayesian Logistic Models for Assessing Under-Five Mortality Risk Factors in Algeria: Evidence from the MICS6 Survey | |
| 11:15–11:30 | Ranya Boustila | Kernel estimator of the functional conditional density under censored data | |
| 11:30–11:45 | Rahmouna Mecene | Linear combinations in Volatility modeling | |
| 11:45–12:00 | Amel Azzi | MODAL REGRESSION ESTIMATION FOR SCALAR RESPONSE WITH FUNCTIONAL TIME SERIES DATA | |
| 12:00–12:15 | Omar El Farouk Cherifi | Some inequalities for a class of dependent random variables and application to a non-parametric regression model | |
| 12:15–12:30 | Aghiles MALOUM | Semiparametric estimation of conditional Frank's Copula when margins are subject of right censoring. | |
| 12:15–12:30 | Manel ElBatoul Merai | The asymptotic properties for a conditional mode of the kernel estimators | |

SESSION: 2 HALL: 1

Google Meet Link: https://meet.google.com/ Chair: Dr. Keddi Abdelmalek

| Oral Presentation: In-Person Mode | | |
|-----------------------------------|-------------------|---|
| | Speakers | Presentation Titles |
| 09:00-09:15 | Nacira Allaoua | A LANGUAGE SHIFT SIMULATION BASED ON ASYNCHRONOUS CELLULAR AUTOMATA |
| 09:15-09:30 | Riad Boudellioua | A numerical study of the annular geometry impact of on forced convection in a Taylor-Couette system |
| 09:30-09:45 | hichem elmossaoui | CONSTRUCTION OF COMPUTER EXPERIMENT DESIGNS USING NEAREST-NEIGHBOUR MARKOV POINT PROCESS |
| 09:45-10:00 | benatmane saadiya | DFT-based computational investigations of the structural, electronic, elastic, and magnetic properties of ternary full-Heusler X2YZ compounds |
| 10:00-10:15 | OUAFA AMIRA | Improved FCM Clustering with Possibilistic and Probabilistic Approaches |
| 10:15–10:30 | Mama Talhi | La tension de claquage des huiles végétales utilisées dans les transformateurs de puissance |

SESSION: 2 HALL: 2

Google Meet Link: https://meet.google.com/

Chair: Dr. Raouf ZAIDI

| Oral Presentation: In-Person Mode | | |
|-----------------------------------|------------------|---|
| | Speakers | Presentation Titles |
| 10:30-10:45 | Sabira Ben alia | Nonlocal variational setting for non-linear image fusion |
| 10:45-11:00 | Ines Garti | On the Cauchy Problem for the Generalized Boussinesq Equation with Logarithmic Nonlinearity: Existence and Blow-up Analysis |
| 11:00-11:15 | Zineb Bellabes | Weak Topology and Fractional Derivatives |
| 11:15-11:30 | Mehdi Bouziane | SEIRV model of COVID-19 |
| 11:30–11:45 | Hadjadj Houari | NUMERICAL ANALYSIS OF MARKOIAN UNIRELIABLE RETRIAL QUEUE WITH MULTIPLE VACATION |
| 11:45 – 12:00 | Houari Fettouche | THE POSSIBLE ORDERS OF GROWTH OF SOLUTIONS TO CERTAIN LINEAR DIFFERENTIAL EQUATIONS |

SESSION: 3 HALL: 1

Google Meet Link: https://meet.google.com/

Chair: Dr. Abdelkader El moumene

| Oral Presentation: In-Person Mode | | |
|-----------------------------------|-----------------------|--|
| | Speakers | Presentation Titles |
| 09:00-09:15 | Ikram Redjaimia | Numerical simulation of the speed ratio effect on the forced convection of a Taylor-Couette system |
| 09:15-09:30 | Nina Hanane | EXISTENCE AND UNIQUENESS RESULTS FOR FBVP BY BANACH'S FIXED POINT THEOREM |
| 09:30-09:45 | Nasreddine Bouchikhi | An Improved Optimization Algorithm for Effective Distributed Generation Integration in Large- Scale Electrical Networks |
| 09:45-10:00 | RIYADH BOUDDOU | Mathematical Modeling of Uncertainties in Distributed Generation Systems for Robust Control in microgrid |
| 10:00-10:15 | Bahlali Dounia | SDEs with past dependence |
| 10:15-10:30 | Youcef elhamam Hemici | Study of a two-parameter conjugate gradient method with different formulas to calculate the stepsize |

SESSION: 3 HALL: 2

Google Meet Link: https://meet.google.com/Chair: Dr. Saidani Mansouria

| Oral Presentation: In-Person Mode | | |
|-----------------------------------|-------------------|---|
| | Speakers | Presentation Titles |
| 10:45-11:00 | Amira Batahri | A class of fractional elliptic problem with increasing power term |
| 11:00–11:15 | Siham Boukarabila | About an elliptic problem with singular nonlinear term and gradient dependence |
| 11:15-11:30 | Ahlem Abdelouahab | AN ELLIPTIC FREE BOUNDARY PROBLEM MODELING TUMOR GROWTH : ASYMPTOTIC BEHAVIOR |
| 11:30–11:45 | Samira Lecheheb | DISTRIBUTIONAL SOLUTION FOR A NONLINEAR ELLIPTIC SYSTEM WITH VARIABLE EXPONENT |
| 11:45-12:00 | Helal Mohamed | Neutral Hyperbolic Fractional Differential Inclusions with Finite Delay in Fréchet Spaces |
| 12:00–12:15 | AIMEN DAOUDI | New Contributions to Caputo Viscoelastic Equations with a Nonlinear Logarithmic Source Term |

SESSION: 4 HALL: 1

Google Meet Link: https://meet.google.com/ Chair: Dr. ZAGANE abderahim

| Oral Presentation: In-Person Mode | | |
|-----------------------------------|--------------------|---|
| | Speakers | Presentation Titles |
| 09:00-09:15 | Adem Aikous | THE HYPERSTRUCTURES |
| 09:15-09:30 | Massinissa KELLALA | On some geometric properties of quasi super modular production functions |
| 09:30-09:45 | Chahrazed Boudefla | Controllable Mild Solutions for Nonlocal Second-Order Neutral Evolution Equations with Finite State-Dependent Delay |
| 09:45-10:00 | Mohamed Karek | ON A NONLINEAR INTEGRO-DIFFERENTIAL EQUATION WITH A NON-LINEAR UNKNOWN SOURCE TERM OF VOLTERRA TYPE |
| 10:00-10:15 | Fatiha Azzemou | Fractional Differential Approach to Modeling Solar Cell Parameters |
| 10:15-10:30 | Habib Ameur | Fractional differential equations |
| 10:15-10:30 | Nawel Bettayeb | ON A COUPLED SYSTEM OF NONLOCAL TEMPERED ψ-CAPUTO FRACTIONAL DIFFERENTIAL EQUATIONS IN GENERALIZED BANACH SPACES |

Google Meet Link: https://meet.google.com/

SESSION: 4 HALL: 2 Chair: Dr. KRIM HANAA

| Oral Presentation: In-Person Mode | | |
|-----------------------------------|-----------------------|--|
| | Speakers | Presentation Titles |
| 10:45-11:00 | Sara Smail | A CHARACTERIZATION OF THE SCHECHTER ESSENTIAL PSEUDOSPECTRUM FOR BLOCK OPERATOR MATRICES |
| 11:00–11:15 | MAADANI MUSTAPHA | A-Hyponormal operator |
| 11:15-11:30 | Amar Ghris | Generalize and improve on some numerical radius inequalities for commutators of bounded linear operators |
| 11:30–11:45 | Ayyoub Fellag ariouat | n power quasi-norml operator |
| 11:45–12:00 | Meriem Araour | On the existence and uniqueness of the solution of fuzzy Caputo integral equations |
| 12:00-12:15 | Sofiane Mahmoudi | ORDER OF GROWTH OF SOLUTIONS OF LINEAR FRACTIONAL DIFFERENTIAL EQUATIONS IN THE COMPLEX DOMAIN |
| 12:15–12:30 | Ahmed Bouchenak | STUDY AND ANALYSIS OF TAYLOR'S SERIES USING THE MODIFIED CONFORMABLE OPERATOR |

SESSION: 5 HALL: 1

Google Meet Link: https://meet.google.com/ Chair: Dr. Menad Abdallah

| Oral Presentation: In-Person Mode | | |
|-----------------------------------|-------------------|---|
| | Speakers | Presentation Titles |
| 09:00-09:15 | Nacira Allaoua | A LANGUAGE SHIFT SIMULATION BASED ON ASYNCHRONOUS CELLULAR AUTOMATA |
| 09:15-09:30 | Ahlem Abdelouahab | AN ELLIPTIC FREE BOUNDARY PROBLEM MODELING TUMOR GROWTH : ASYMPTOTIC BEHAVIOR. |
| 09:30-09:45 | Nora Dekkiche | EVALUATION OF AN ELLIPTIC DIFFERENTIAL EQUATION IN THREE HABITATS WITH ASYMMETRIC BOUNDARY CONDITIONS AT INTERFACES IN LQ SITUATIONS |
| 09:45-10:00 | Abdelkrim Kina | ON LIMIT CYCLE FOR THE CLASS OF NONLINEAR DIFFERENTIAL SYSTEM |
| 10:00–10:15 | Lakehal Rachid | STABILITY RESULT FOR A TIMOSHENKO SYSTEM WITH THERMODIFFSION EFFCTS |
| 10:15-10:30 | IBRAHIM DAAMECHE | Well-posedness and energy decay for full von Karman system of dynamic theromelasticity damped with distributed delay and past history terms |

SESSION: 5 HALL: 2

Google Meet Link: https://meet.google.com/Chair: Dr. Djemia Bensikaddour

| Oral Presentation: In-Person Mode | | |
|-----------------------------------|-----------------|--|
| | Speakers | Presentation Titles |
| 11:00–11:15 | Rima FAIZI | FAEDO-GALERKIN METHOD FOR TIME-FRACTIONAL PARABOLIC |
| | | EQUATION |
| 11:15–11:30 | Mohammed Kaid | Existence of Solutions FDE |
| 11:30-11:45 | Mahdi RAKAH | Fractional calculus in beam deflection: Uniqueness of solutions, Ulam–Hyers stability and travelling waves |
| 11:45-11:00 | Chaima Boutiba | New Operational Matrix for Solving Prabhakar Fractional Differential Equations |
| 12:00–12:15 | Wissame Selmani | Some inequalities for fractional integrals |
| 12:15–12:30 | Leyla Soudani | ON THE STUDY OF A FRACTIONAL DIFFERENTIAL INCLUSION |

SESSION: 6 HALL: 1

Google Meet Link: https://meet.google.com/Chair: Dr. BOUABÇA Wahiba

| Oral Presentation: In-Person Mode | | |
|-----------------------------------|--------------------|---|
| | Speakers | Presentation Titles |
| 09:00-09:15 | Souad SALMI | Stability Margin and Region for Fractional Linear Systems: A Robust Approach Using Linear Matrix Inequalities |
| 09:15-09:30 | HAMIDAT NADJAT | Potential effect of diabetes on the dynamic model of hepatitis C disease |
| 09:30-09:45 | Fadila Leslous | Modélisation d'un problème semi-infini en relation avec la gestion des déchets industriels |
| 09:45–10:00 | Sakina Benkaddour | Existence of solution for SDE driven by the Rosenblatt process |
| 10:00-10:15 | Nesrine KARA TERKI | Normalité Asymptotique Locale pour un processus autorégressif fonctionnel |
| 10:15–10:30 | Abderrahmen MANAA | On Periodic ZIP-INGARCH model Appling on COVID-19 Data |

SESSION: 6 HALL: 2

Google Meet Link: https://meet.google.com/ Chair: Dr. TABHARIT Louiza

| Oral Presentation: In-Person Mode | | |
|-----------------------------------|-----------------|--|
| | Speakers | Presentation Titles |
| 10:45-11:00 | Salima Mansouri | NUMERICAL SOLUTION OF A FRACTIONAL COUPLED SYSTEM WITH THE CAPUTO-FABRIZIO FRACTIONAL DERIVATIVE |
| 11:00-11:15 | Souad BOUGUESSA | Analyse de la Stabilité des Systèmes Fractionnaires |
| 11:15–11:30 | Samar Chebbah | Additive Schwarz Method For Coercive Variational Inequalities |
| 11:30–11:45 | Besma Fadlia | EXISTENCE AND UNIQUENESS OF WEAK SOLUTIONS FOR ANTIPLANE CONTACT PROBLEMS WITH FRICTION AND ADHESION |
| 11:45–12:00 | Meneceur Maroua | FIXED POINT RESULTS IN QUASI-PARTIAL METRIC SPACES VIA C-CLASS FUNCTIONS WITH AN APPLICATION |
| 12:00–12:15 | Sarra Gaouir | New class of sweping process |

SESSION: 7 HALL: 1

Google Meet Link: https://meet.google.com/

Chair: Dr. KAID Mohammed

| Oral Presentation: In-Person Mode | | |
|-----------------------------------|--------------------|--|
| | Speakers | Presentation Titles |
| 09:00-09:15 | BELGACEM TIKIALINE | Boundary control and asymptotic stability of an axially moving with a logarithmic nonlinearity |
| 09:15-09:30 | Mouna Abdelli | DISCRETIZATION OF NO-REGRET AND LOW-REGRET CONTROLS |
| 09:30-09:45 | Abed Yfrah | Full-descretization and semi-descretization for a viscoelastic wave equation |
| 09:45–10:00 | Abdelkader Benali | GENERALIZATION OF KAPLASNSKY THEOREM FOR SOME (p, k)-QUASIHYPONORMAL |
| 10:00-10:15 | Amina Delhoum | Skew cyclic codes over a finite ring and application |
| 10:15–10:30 | Azzouz Belqassim | Study for a coupled problem of \$k\$-Hilfer |

SESSION: 8 HALL: 1

Google Meet Link: https://meet.google.com/ Chair: Dr. BELARBI Mansour

| Oral Presentation: In-Person Mode | | |
|-----------------------------------|----------------------------|--|
| | Speakers | Presentation Titles |
| 09:00-09:15 | abdel hakim azzedine | A Novel Mathematical Approach To Quality Control In Complex Dynamic Systems |
| 09:15-09:30 | Manel Sbia | ANALYSIS OF THE DYNAMICS AND CONTROL OF EPIDEMIOLOGICAL MODELS |
| 09:30-09:45 | mohamed dellal | Competition Dynamics and Stability Analysis in a Chemostat Model with Allelopathic Inhibition and Non-Monotonic Growth Rates |
| 09:45-10:00 | Benmessaoud Hibaterrahmane | EXISTANCE DE SOLUTION DU PROBL'EME DYNAMIQUE THERMO-VISCO'ELASTIQUE DES DONN'EES L1 |
| 10:00-10:15 | Hamidat Ahmed | DAMAGE EVOLUTION AND CONTACT ANALYSIS IN THERMO-ELECTRO-ELASTIC-VISCOPLASTIC MATERIALS |
| 10:15–10:30 | Ghermoul Khedoudja Sirine | Asymptotic behaviour of a class of reaction diffusion difference systems with distributed delay and non monotone bistable nonlinearity |