## **DETAILED MATHEMATICS PROGRAM**

- Probability and Statistics
- Applied Algebra and Geometry

**MPSA** 

| N° | LAST NAME | NAME                | CO-AUTHORS     | TITLE OF PRESENTATION   | ORAL /POSTER | CODE     | SESSION              |
|----|-----------|---------------------|----------------|---|--------------|----------|----------------------|
| 1  | LAALA     | Barkahoum           |                | An overview on modeling techniques and the accuracy measures with an application example  | Oral         | MPSA-O01 | ORAL<br>SESSION<br>5 |
| 2  | CHERGUI   | Rachid              |                | Aperçu de la cryptographie et du codage de Lucas  | Oral         | MPSA-O02 | Oral<br>Session 2    |
| 3  | СНЕТТОИН  | Raouda              |                | The Relation Between the Numerical Range of Tow Sub-Self-Adjoint Operators  | Oral         | MPSA-003 |                      |
| 4  | BENAOUDA  | Oum Elkheir         |                | Asymptotic Normality in Nonparametric<br>Regression Quantile Estimation for<br>Dependent Functional Data under Random<br>Censorship | Oral         | MPSA-O04 | ORAL                 |
| 5  | BOUKELOUA | Mohamed             |                | Divergences based Bayesian estimation with censored data  | Oral         | MPSA-005 | ORAL SESSION         |
| 6  | BOUSTILA  | Rania               | Leulmi Sarra   | Asymptotic normality of the kernel estimator of the conditional distribution for functional and right-censored data                 | Oral         | MPSA-O06 | Ζ                    |
| 7  | CHEBEL    | Zoheir              |                | Hom-action and Hom-Bi-action With Applications  | Oral         | MPSA-007 |                      |
| 8  | HAMIMES   | Ahmed               | DJAFRI Houria  | The Bayes factor for evaluating disparities in cure percentages within survival curves  | Oral         | MPSA-008 |                      |
| 9  | LABIOD    | Imene               |                | Generating functions of the triple product of Padovan number with square well-known Gaussian numbers                                | Oral         | MPSA-009 | ORAL SESSION         |
| 10 | МЕККІ     | Soundes             | Labdaoui Ahlam | Comparative Analysis of Autoencoder<br>Variants for Image Reconstruction Using the<br>Olivetti Face Dataset                         | Oral         | MPSA-O10 | :SSION 4             |
| 11 | MERAI     | Manal El<br>Boutoul | DJAFRI Houria  | The strong consistency of the kernel conditional distribution estimator   | Oral         | MPSA-O11 |                      |

| 12 | MIME      | Rania        | F. BOUDAOUD  | On the realizability of matrices over SL_2 (R[ x_1^±,,x_k^±])  | Oral   | MPSA-O12 |                     |
|----|-----------|--------------|--|--|--------|----------|---------------------|
| 13 | MOUSSAOUI | Khadidja     | Benjamin Earp-Lynch , Simon Earp-<br>Lynch , Omar KIHEL and<br>Abdelmoumene ZEKIRI | ON CERTAIN D(9) AND D(64) DIOPHANTINE TRIPLES  | Oral   | MPSA-O13 | ORA                 |
| 14 | RALEM     | Sabrina      | ASMA Maamar and LIMAM Kheira   | Solving a family of transmission boundary problems governed by complet elliptic differential equations in UMD spaces | Oral   | MPSA-O14 | ORAL SESSION 5      |
| 15 | SAIHI     | Ferial       | Mohamed Boukeloua and Sarra<br>Leulmi  | Asymptotic Normality of a Kernel Conditional Quantile Estimator  | Oral   | MPSA-O15 | 5                   |
| 16 | SEFFAH    | Safia        | S.ERihane and Alain Togbé  | Solving the Diophantine Equation $F_n^((k))$<br>L_m^((k))=(a(10^l-1))/9  | Oral   | MPSA-O16 |                     |
| 17 | BOULAHIA  | Abdelmoumene |  | Reliability of (n, f, k): F system with sparse d for Markov-dependent components                                     | Poster | MPSA-P01 |                     |
| 18 | LABIOD    | Imane        |  | Generating functions of the triple product of Padovan number with square well-known Gaussian numbers                 | Poster | MPSA-P02 | POS-                |
| 19 | LAHCENE   | Selma        |  | Distance Correlation : A Powerful tool for Reveling Hidden Dependecies in Time Series                                | Poster | MPSA-P03 | POSTER SESSION 1    |
| 20 | SACI      | Marwa        | Abdelhak Djebabla  | Exponential stabilization of the linear porous elastic materials with microtemperatures effects                      | Poster | MPSA-P04 | SION 1              |
| 21 | TILBI     | Djahida      |  | Bayesian and Non Bayesian Analysis of the<br>New One Parameter Model under Right<br>Censored Data                    | Poster | MPSA-P05 |                     |
| 22 | BELAKHDAR | Sara         | Merabet Hayet  | Comparison of predictive probabilities in fully Bayesian and hybrid frequentist Bayesian approach.                   | Poster | MPSA-P06 | POSTER SESSION<br>2 |
| 23 | BOUCHOUL  | Melissa      | Leulmi Sarra   | Estimation non paramétrique de la fonction de régression relative pour des données censurées.                        | Poster | MPSA-P07 | SESSION             |

| 24 | BOULOUDENE | Moussa | I Soheir Belaloui | Bounds for Consecutive k-out-of-n: G Systems with Dependent Components | Poster | MPSA-P08 |  |
|----|------------|--------|-------------------|--|--------|----------|--|
| 25 | кімоисне   | Karima |                   | Statistical analysis of spatio-temporal bilinear processes             | Poster | MPSA-P09 |  |

## **DETAILED MATHEMATICS PROGRAM**

- Numerical ODEs and Numerical PDEs (inc. BVPs)
  - Fractional Calculus and its Applications
- Mathematical modelling in Engineering and Transport Phenomena
  - Scientific Computing and Algorithms
  - Dynamical Systems and Algorithms
  - Complexity Theory, Neural Networks and Fuzzy Systems
    - Transport Phenomena

**MNF** 

| N° | LAST NAME   | NAME           | CO-AUTHORS      | TITLE OF PRESENTATION   | ORAL /<br>POSTER | CODE    | SESSION      |
|----|-------------|----------------|-----------------|---|------------------|---------|--------------|
| 1  | HADJ        | Abdelhak       |                 | Recovering Steklov Parameters and<br>Boundary Conditions in the Forth Ortler<br>Partial Differential Equation Using<br>Incomplete Cauchy Data.    | Oral             | MNF-001 | ORAL         |
| 2  | HAMMOU      | Bouthina Sabah | Ameur Memou     | A study of fractional diffusion equation with non-local conditions involving the Caputo derivatives   | Oral             | MNF-O02 | AL SESSION   |
| 3  | ABID.CHAREF | Okba           | BOUAOUN. Mayada | Min-Max Optimal Design of a Non-<br>Conventional Dynamic Absorber System with<br>Negative Stiffness for Vibration Control of<br>Damped Structures | Oral             | MNF-O03 | N 1          |
| 4  | ARAR        | Nouria         |                 | Operational Matrix and Collocation Techniques for Fractional Volterra Equations Using Generalized Lucas Polynomials                               | Oral             | MNF-004 | ORA          |
| 5  | BELLAMOUCHI | Chahinez       |                 | Existence of positive solution for some nonlocal elliptic problem   | Oral             | MNF-005 | ORAL SESSION |
| 6  | BENDAAS     | Yasmina        | Mohamed Achache | A polynomial-time interior-point algorithm for solving canonical convex quadratic semidefinite optimization                                       | Oral             | MNF-O06 | ON 2         |
| 7  | CHABANE     | Khaoula        | A. Mansour      | A new class sub-self-adjoint operator in Hilbert spaces   | Oral             | MNF-008 | O            |
| 08 | CHETTIH     | Nadjet         | Labdaoui Ahlam  | RFE-SVM: An Approach to Enhancing Support Vector Machine Performance through Recursive Feature Elimination  | Oral             | MNF-O09 | ORAL SESSION |
| 09 | DALAH       | Mohamed        | Ammar Derbazi   | Numerical Solution of the 2D Wave Equation<br>Using Higher-Order Finite Differences: Codes<br>Matlab  | Oral             | MNF-O10 | S N 3        |

| 10 | MEZHOUD    | Kenza Assia  | A.Kharoua, Z.Mohdeb              | Asymptotic study of Local linear predictor for time series  | Oral   | MNF-011 |                   |
|----|------------|--------------|----------------------------------|---|--------|---------|-------------------|
| 11 | SAADI      | Faiza        |                                  | An easy enhancement in the efficiency of the Nguyen-Widrow initialization method in neural networks   | Oral   | MNF-O12 | ORAL SESSION      |
| 12 | ZELMATI    | Djamel       | Ghelloudj Oualid and Harouz Riad | Probability of Failure of a Corroded Pipeline<br>Considering Correlations Between Random<br>Variables | Oral   | MNF-O13 | SSION 4           |
| 13 | BENOTMANE  | Karima       | Omar KHOLAI, Mourad CHEKIRED     | Core Annular Flow investigated by in-House CFD Solver   | Poster | MNF-P01 |                   |
| 14 | BENRABAH   | Sakina       | Samir Ladaci and Samir Benhadid  | Sliding Mode Stabilization for a class of fractional-order chaotic systems                            | Poster | MNF-P02 |                   |
| 15 | BENZATAT   | Rim          | Hamid Benseridi and Mourad Dilm  | Viscoelastic problem with Tresca's friction law   | Poster | MNF-P03 | POSTER SESSION 1  |
| 16 | BERGUELLAH | Nour elhouda |                                  | General study of a modified chaotic model   | Poster | MNF-P04 | R SESSI           |
| 17 | BOULEHAM   | Faiza        | TENIOU NIHED                     | REGULARIZATION METHOD FOR A CLASS OF INVERSE PROBLEMS OF PARABOLIC DIFFERENTIAL OPERATOR EQUATION     | Poster | MNF-P05 | ON 1              |
| 18 | FEKRACHE   | Zine Eddine  | Houmor Tarek                     | Hopf bifurcation in a predator-prey biological economic system with a nonlinear harvesting rate.      | Poster | MNF-P06 |                   |
| 19 | HANECHE    | Nabil        |                                  | Complex dynamics and chaos in a fractional-<br>order discrete-time SIS epidemic model                 | Poster | MNF-P07 |                   |
| 20 | LAKHDAR    | Asmaa        |                                  | Comparative Analysis of Electromagnetic Fields in Flat vs. Curved Spacetime Using Maxwell's Equations | Poster | MNF-P08 | POSTER<br>SESSION |
| 21 | MEROUDJ    | Souad        | ZERIMECHE Hadjer, HOUMOR tarek   | Finite-Time Projective Synchronization of Fractional-Order Chaotic Systems with Different Structures  | Poster | MNF-P09 | TER<br>ON 2       |

| 22 | ZAAMOUNE   | Faiza    |                              | A Novel 4D Hyperchaotic System Without Equilibrium Points.               | Poster | MNF-P10 |
|----|------------|----------|------------------------------|--|--------|---------|
| 23 | ZEDDAM     | Loukmane | A. Kirad F. Madani           | Effect of a Sudden Torsional Load on a<br>Homogeneous Elastic Half-Space | Poster | MNF-P11 |
| 24 | MATALLAH   | Hana     | Maouni Mesouad, Lekhal Hakim | Fractional Derivative Equation with Application in Image Processing      | POSTER | MNF-P12 |
| 25 | BOUDJEDOUR | ALAOUA   | Dalah Mohamed                | Finite Difference method for Solving Heat Equation: Codes Matlab         | Poster | MNF-P13 |