Congrès international
Sur l'analyse numérique des EDP
Programme Provisoire

Heure	Lundi 16/10/2023
08h00-09h00	**Accueil des Participants** **Salle des conférences**
09h00-09h30	**Cérémonie d'ouverture**
09h30-09h50	**Pause**
09h50-10h50	**Conférence: Francisco Ortegon Gallego** Capacity solution and numerical approximation to a strongly nonlinear anisotropic parabolic-elliptic system **Chairman: H. Allouch** **Salle des conférences**
10h50-11h50	**Conférence: Jürgen Fuhrmann** Voronoi finite volume methods for complex applications in Julia **Chairman: A. Naji** **Salle des conférences**
	Session 1 : Analyse Numérique **Chairman: N. Samouh**
11h50-12h10	**Y. AMIROUNE**, M. ADDAM, Finite volume method for the linearized navier-stokes equation
12h10-12h30	**H. El khalfi**, O. Baiz and H. Benaissa, Error estimates of piezoelectric Signorini's contact problems
12h30-12h50	**S. Hamidi**, M. El Ossmani and A. Taakili, A fully implicit nonlinear finite volume scheme preserving positivity for degenerate parabolic equation in porous media
12h50-13h10	**E. OUAKIF**, M. ADDAM, Finite element method for solving the Stokes equation
13h10-13h30	**M. Jourhmane**, Accelerated iterative algorithms for the Cauchy problem in some PDEs
13h30-15h20	**Déjeuner**
	Session 1 : Analyse Numérique **Chairman: A. Monir**
15h30-15h50	**L. El Ouadefli**, A. El Akkad and A. Elkhalfi, Multi-patch isogeometric analysis for Stokes problem
15h50-16h10	**M. El Abbassi** and C. Ziti, Solving a Scalar Conservation Law Problem With an Arbitrary Flux And a Riemann Initial Condition
16h10-16h30	**S. Essarroute**, Z. Mahani and S. Raghay, Solving partial differential equations with stochastic coefficients: models and methods
16h30-16h50	**A. EL-ALAOUI**, A. MONIR and H. MRAOUI, Local Regression Spline Modeling with Applications
16h50-17h10	**Pause**
17h10-17h30	**N. Siar**, R. Cavoretto, F. Dell'Accio, A. De Rossi, F. Di Tommaso, A. Sommariva and M. Vianello, Numerical cubature on scattered data by adaptive interpolation
17h30-17h50	**A. Ettaouil**, N. Joudar, R. El khaoulani El idrissi, Integration of numerical approaches to partial differential equations and learning of conventional Neural networks: Applications in image processing
17h50-18h10	**M. OUSBIKA** and Z. EL ALLALI, On a Partial Difference Equations with p-Laplacian operator

18h10-18h30	**M. Amarchich**, N. Moussaid, O. Gouasnouane, A. Ben-Loghfyry, Mathematical analysis of a variational model based on gradients similarity measures and high order regularization for medical image registration problem
18h30-18h50	**J. Attmani**, A. Atlas, F. Karami and D. Meskine, Convergence of a finite volume scheme for a parabolic system applied to image denoising
	Session 2: Modélisation Mathématique **Chairman: A. Faik**
11h50-12h10	**S. SALLAM** and M. TAQI, Impact of the feed water flow rate on direct steam generation for industrial application
12h10-12h30	**S. Hakim**, N. Laaroussi and M. Garoum, Modeling and simulation of punctual rejection of a pollutant in uniform wind and homogeneous turbulence using the Computational Fluid Dynamics code Code Saturne
12h30-12h50	**Y. Lamrhary**, A. Jebrane, A. Boukamel, and A. Hamdaoui, A hybrid model incorporating emotional contagion for crowd dynamics simulation
12h50-13h10	**M. El Azar**, A. Bouhlal and A. Jellal, Electron trapping in graphene quantum dots with magnetic flux
13h10-13h30	**M. Baroudi**, H. Gourram, A. Labzai, M. Belam, Mathematical modeling and monkeypox's optimal control strategy
13h30-15h20	**Déjeuner**
	Session 2: Modélisation Mathématique **Chairman: F-Z. Allaoui**
15h30-15h50	N. **MADANI**, Z. HAMMOUCH and E. AZROUL, The influence of vaccination on the meningitis epidemiological model with diffuse transmission
15h50-16h10	**A. HADDACH**, Hassan SMAOUI and Bouchaib RADI, 2D Lattice Boltzmann method for coastal flow: schematic case of Gibraltar Strait
16h10-16h30	A. Alla Hamou, E. Azroul, **G. Diki** and M. Guedda, Effect of family and public health education in drug transmission: an epidemiological model with memory
16h30-16h50	**H. Abou-nouh** and M. El khomsi, A Fractional Model for Analyzing the Dynamics of Informal Economy
16h50-17h10	**Pause**
17h10-17h30	**A. Lamghari**, D. S. I. Kanté, A. Jebrane and A. Hakim, Forecasting infectious disease transmission with an SEIR model and social contact matrices
17h30-17h50	**A. LAMRANI ALAOUI**, M. MEHDAOUI and M. TILIOUA, Dynamical analysis of a stochastic non-autonomous SIR model with vaccination
17h50-18h10	C. CHOQUET, **M. OUHADAN** and M. TILIOUA, Rigorous homogenization tools for the routing management problem in dense networks with transmission defects
18h10-18h30	**A. Bahssini**, N. Izem, M Shadi Mohamed and M. Seaid, Directional enrichment functions for finite element solutions of transient anisotropic diffusion
18h30-18h50	**M. M. Ould khatri**, A. Youssfi, Semilinear heat equation with singular terms
	Session 3: Contrôle Optimal & Optimisation **Chairman: K. Ztot**
11h50-12h10	**E. MOUMINE**, O. BALATIF and M. Rachik, Modeling and Mathematical Analysis of Drug Addiction with The Study of The Effect of Psychological and Biological Treatment
12h10-12h30	**M. Lassri**, Solving non-homogeneous second order difference equation with periodic coefficients via recursive sequences
12h30-12h50	**H. Gourram**, M. Baroudi, A. Labzai and M. Belam, Mathematical Modeling and Optimal Control Strategy for The Influanza (H5N1)
12h50-13h10	**T. Aslaoui**, B. Ben Amma, S. Melliani and L. S. Chadli, On intuitionistic fuzzy solutions of initial-boundary value problem for second order differential equations
13h10-13h30	**A. BEN MOUSSA**, A. KHAZARI and A. TSOULI, Some remarks of reinforcement learning and optimization
13h30-15h20	**Déjeuner**
	Session 3: Contrôle Optimal & Optimisation **Chairman: R. Larhrissi**

15h30-15h50	A. **Tsouli** and A. Khazari, Feedback stabilization of distributed second order non-homogeneous bilinear retarded systems
15h50-16h10	**R. BOUCHANTOUF**, O. BAIZ an H. BENAISSA, Optimization Problems for a Thermoelastic Frictional Contact Problem
16h10-16h30	**M. Benoudi** and R. Larhrissi, Spatial α-Fractional Output Stabilization of Distributed Bilinear Systems with a Time Delay
16h30-16h50	**I. Sahib**, B. Khajji and M. Belam, Mathematical modeling and optimal control strategy for a discrete-time cholera model
16h50-17h10	**Pause**
17h10-17h30	**K. CHANNAN**, K. HILAL, A. KAJOUNI, Stability Analysis Of a Fractional Epidemiological Model With Time Delay
17h30-17h50	**F. Cherkaoui**, K. Hilal and A. Qaffou, Global stability analysis of a delayed fractional-order SVEIR epidemic model
17h50-18h10	**M. El Hammani**, S.M. Douiri and I.El Harraki, Quantifying Chemotherapy Resistance Dynamics through Mathematical Modeling and Optimal Control
18h10-18h30	**Z. DARDOUR**, L. LAFHIM AND E. KALMOUN, Second-order necessary optimality conditions in bilevel programming
18h30-18h50	**T. KARITE** and A. Khazari, Regional controllability of fractional systems with delay in control

Heure	Mardi 17/10/2023
09h00-10h00	**Conférence: Hassan SAFOUHI** Recent Advances in the Computation of Molecular Integrals The Case of the Three-Center Nuclear Attraction Integral **Chairman: C. Ziti** **Salle des conférences**
10h00 -11h00	**Conférence: Martin Vohralík** A posteriori error estimates robust with respect to nonlinearities and final time **Chairman: Z. Mghazli** **Salle des conférences**
11h00-11h15	**Pause**
	Session 1 : Analyse Numérique **Chairman: N. Siar**
11h15-11h35	K. Ezzinbi, **A. Hardoul**, Z. Mghazli, A Mathematical Model For Trichoderma Fungi Kinetics
11h35 -11h55	**M. Nachaoui**, L. Afraites, A. Hadri and A. Laghrib, Solving an inverse problem for image denoising based on a high-order PDE
11h55-12h15	**I. EL OUARDY**, EL-H. BENKHIRA, R. FAKHAR and Y. MANDYLY, Numerical analysis of modified Signorini problem with Coulomb's friction law in electro-elasticity
12h15-12h35	**I. El barkani** and M. Addam, High-Order Tensorial Spline Finite Element Method Solver for the Time-Domain Transverse Electromagnetic Wave Problem
12h35-12h55	**A. BOUKDIR**, M. NACHAOUI and A. LAGHRIB, On some evolution equation with combined local and nonlocal p-Laplace operator for image denoising
13h00-14h50	**Déjeuner**
	Session 1 : Analyse Numérique **Chairman: S. Khallouq**
14h50 -15h10	**H. Hafidi**, A. Naji, A. Aharmouch and F. Ghafrani, Solving singularly perturbed nonlinear Burgers' equation using space-time localized meshless method based on coupling radial and polynomial basis functions
15h10-15h30	**Y. KHALI**, S. KHALLOUQ and N. NAGID, A parallel Schwarz preconditioners for a stable finite difference descritezations of a vibration problem
15h30-15h50	**A. BEN BOUZID**, S. KHALLOUQ and N. NAGID, Convergence of a time-Schwarz domain decomposition for a beam equation
15h50-16h10	**A. BEN ABDELLAH** and M. ADDAM, Galerkin Approximation of the Time-Domain thin plate deformation problem using γ-Tensorial Spline
16h10-16h30	**S. MOUJID**, H. AMRANI SOUHLI and A. KADDAR, Development of a New High-Order Scheme for Solving the Nonlinear Diffusion Equation
16h30-16h50	**Pause**
16h50-17h10	**M. Bouchlaghem,** E. Mermri, Regularization of a two membranes problem
17h10-17h30	**I. BARBARA**, T. MASROUR and M. HADDA, Utilizing a Deep Galerkin Method (DGM) with special mesh-free sampling strategies for accurate PDE solutions
17h30-17h50	**H. Ouyahya**, F. Ortegon Gallego and M. Rhoudaf, An existence result and numerical approximation to a nonlinear elliptic coupled system in anisotropic Orlicz-Sobolev spaces
17h50-18h10	**M. MABDAOUI**, M. RHOUDAF and H. MOUSSA, Finite element method for elliptic problems involving the operators satisfying non-polynomial growth
18h10-18h30	**N. MOHAOUI**, A. MONIR and H. MRAOUI, Distribution and Density Estimation Based on local-constant kernel and Spline Method
18h30-18h50	**I. OUMADANE**, M. ZITANE, Periodic behavior of non-autonomous neutral partial functional differential equations

	Session 2: Modélisation Mathématique **Chairman: B. Lahmi**
11h15-11h35	**Y. DIFAA**, O. BAIZ and H. BENAISSA, On a safety distribution for a class of SEIRS epidemic model
11h35 -11h55	**M. Tahiri**, Global Analysis of a time fractional order spatio-temporal SIR model
11h55-12h15	A. Tsouli and **A. Khazari**, Feedback stabilization of distributed second order non-homogeneous bilinear retarded systems
12h15-12h35	**A. Fadili**, Regularized Resolvent For Abstract Volterra Equations
12h35-12h55	**M. Ait Hammou**, On a nonlocal problem involving fractional $p(x,\cdot)$-Laplacian with non-standard growth
13h00-14h50	**Déjeuner**
	Session 2: Modélisation Mathématique **Chairman: M. Zitane**
14h50 -15h10	**M. RAHIOUI**, E. EL KINANI and A. OUHADAN, On the time fractional higher-order nonlinear Boussi- nesq–Burgers system: invariant analysis and approxi- mate solutions
15h10-15h30	**H. Ben Brahim** and F. Z. El Alaoui and K. Zguaid, Some Results Regarding Observability and Initial State Reconstruction For Time-Fractional Systems
15h30-15h50	E. Zerrik, **A. Akoubi** and A. Ait Aadi, Boundary stabilization of bilinear systems
15h50-16h10	**M. Ouhafsa**, E. Zerrik and A. Ait Aadi, Boundary optimal control problem for semi-linear systems
16h10-16h30	**I. DAHI** and M. R. SIDI AMMI, Existence and uniqueness of an entropy solution to nonlinear parabolic equation with an obstacle
16h30-16h50	**Pause**
16h50-17h10	**N. Hafidi**, M. Nachaoui et A. Hadri, Hyperparameter optimization model selection via bi-level optimization formulation
17h10-17h30	A. Bouzelmate, H. Hjiaj and **I. Raiss**, Study of some degenerated unilateral equation in the anisotropic weighted Sobolev spaces
17h30-17h50	**R. Addouch**, N. Moussaid, O. Gouasnouane, A. Ben-Loghfyry, A combined total fractional-order variation and bilateral approach for image denoising
17h50-18h10	**C. Allalou**, Fractional Navier-Stokes-Coriolis equations, Besov space type Characterized by Semigroups, global mild solutions
18h10-18h30	**H. Khaider**, A. Azanzal and C. Allalou, Global well-posedness for the 3D fractional magneto-hydrodynamics equations in the Besov-Morrey spaces characerized by Semi-group
18h30-18h50	**El-H. BENKHIRA**, J. CHAOUI, R. FAKHAR, Y. MANDYLY, Mathematical Modeling and Analysis of Micropolar Fluid Flow with Frictionless Contact Boundary Conditions
	J. El Amrani, H. El Jarroudi and A. Lahrouz, Analysis and simulations of an epidemic model with memory effects
	Session 3: EDP **Chairman: H. Sabiki**
11h15-11h35	**M. EL FATRY**, M. MEKKOUR and Y. AKDIM, Existence of a renormalized solution for a class of elliptic-parabolic problems
11h35 -11h55	**M. El Hichami** and Y. El Hadfi, Existence of bounded solutions for a class of singular elliptic problems involving the 1-Laplacian operator
11h55-12h15	**A. Sbai**, The impact of a Hardy potential and lower order terms in a Dirichlet problem with a singular nonlinearity
12h15-12h35	**H. Talbi**, M. Rhoudaf and F. Ortegon Gallego, Existence and numerical simulations to strongly nonlinear elliptic system related to the thermistor problem of $\vec{p}$-Laplace-type
12h35-12h55	A. JAMEA, M. LAGHDIR and **A. KADDIRI**, Existence of entropy solutions to nonlinear parabolic problems with variable exponent and l1-data
13h00-14h50	**Déjeuner**

	Session 3: EDP Chairman: Y. Akdim
14h50 -15h10	H. MOUSSA, **F-Z. GHOLALI**, Parabolic problems, Orlicz-Sobolev spaces, Entropy Solutions, noncoercive problems
15h10-15h30	**O. BAALI**, A. CHAIRA and B. LAHMI, Necas Identity For The Biharmonic Operator In Lipschitz Domain
15h30-15h50	**B. Ben Amma**, S. Melliani and L. S. Chadli, Results on partial differential equations with intuitionistic fuzzy parameters via fixed point theorem
15h50-16h10	**M. IDRISSI**, M. KHOUAKHI, M. MASMODI and C. YAZOUGH, Global existence of solutions for a parabolic system with logarithmic nonlinearity
16h10-16h30	**H. Farjil**, S. M. Douiri and M. Moumni, The existence and uniqueness results for the combination of Perona-Malik and Leray-Lions operator equation in L^p spaces
16h30-16h50	**Pause**
16h50-17h10	A. JAMEA, M. LAGHDIR and **E. HASSOUNE**, Existence and unequeness of weak solutions to nonlinear parabolic problems with variable exponent and l^∞-data
17h10-17h30	R. Echarghaoui, **R. Sersif**, Infinitely many solutions for a double critical Sobolev problem with concave nonlinearities
17h30-17h50	R. Echarghaoui, M. Khouakhi and **M. Masmodi**, Existence and multiplicity of positive solutions for a class of critical fractional Laplacian systems
17h50-18h10	**Y. HAJJI** and H. Hjiaj, Entropy solutions for some nonlinear and noncoercive parabolic problems with Hardy potential
18h10-18h30	**H. EL-HOUARI**, S. KASSIMI, H. MOUSSA and H. SABIKI, Fractional musielak spaces: a class of non-local problem involving concave-convex nonlinearity
18h30-18h50	**M.B. Benboubker**, H. Benkhalou and H. Hjiaj, Entropy solutions for anisotropic unilateral elliptic problem with Neumann boundary conditions
18h50-19h10	**F. Balaadich**, Existence of solutions to a non-local problem
19h10-19h30	**O. YACINI**, C. ALLALOU and K. HILAL, Existence and uniqueness of weak solution for fourth-order problems via topological degee method

Heure	Mercredi 18/10/2023
09h00-10h00	**Conférence : Patrick Perré** Stratégies de résolution numérique d'EDPs couplées et fortement non-linéaires **Chairman: A. Hamam** **Salle des conférences**
10h00 -11h00	**Conférence : Quenjel El Housseine** Schémas numériques pour la résolutions des EDPs et applications à la prédiction des propriétés macroscopiques de biomatériaux **Chairman: E. Azroul** **Salle des conférences**
11h00-11h15	**Pause**
	Session 1 : Analyse Numérique **Chairman: M. Jourhmane**
11h15-11h35	R. Ben Taher, **D. Zioual** and H. Benkhaldoun, Simple Periodic Continued Fractions via linearly recurring sequences
11h35 -11h55	**K. El haiti**, Y. El jabri and O. Aboutafail, Physic Informed Neural Solution for Nonlinear Partial Differential Equations
11h55-12h15	**S. MAAQOUL**, H. BELHADJ and M. R. AMATTOUCH, Numerical solutions of a Burgers' equation with viscosity based on Lie-Trotter and strang operator-splitting methods
12h15-12h35	**M. LAHARECH**, M. Rhoudaf, Etude d'un problème nonlinéaire par la méthode des volumes finis
12h35-12h55	**M.R. AMATTOUCH**, H. Belhadj, A study of the FitzHugh-Nagumo model with diffusion term
12h55-13h15	**O. Benaissi**, N. Joudar, M. Ettaouil, Modèle d'équations aux dérivées partiels de type p-laplacien et traitement d'images
13h15-13h25	**S. Chakir** and R. Malek, Blow-Up Phenomenon in Keller-Segel Chemotaxis Models Using Characteristic Finite Elements Method
13h25-13h45	**H. AGHDAOU**, M. TILIOUA, A fractional derivatives & Machine Learning methods
	Session 2: EDP **Chairman: A. Youssfi**
11h15-11h35	**K. Soualhine**, M. Talbi, M. Filali and N. Tsouli, Three weak solutions for a class of fourth order p(x)-Kirchhoff type problem with Leray-Lions operators
11h35 -11h55	**H. SABIKI**, Existence of infinite weak solutions for a nonlocal eigenvalue problem in Fractional Orlicz-Sobolev Spaces with indefinite weight
11h55-12h15	**A. Lakhdi**, M. R. Sidi Ammi and B. Karim, Existence of two solutions for a class of Steklov problems involving (p(x), q(x))-Laplacian
12h15-12h35	**M. Bahadi**, Y. Akdim, Elliptic problem with a singular nonlinearity
12h35-12h55	**J. Ouazzani Chahdi**, M. Bourahma and H. Hjiaj, Existence of renormalized solution for a class of nonlinear parabolic systems in nonreflexive Orlicz-Sobolev spaces
12h55-13h15	E. Azroul, **M. Khouakhi**, M. Masmodi and C. Yazough, Strongly nonlinear parabolic equations with natural growth in general domains
13h15-13h25	**E. RAMI**, Existence of solutions for some quasilinear elliptic system with second member the sum of a measure and a function

13h25-13h45	**A. BARBARA**, M. BOUZIANI and E. AZROUL, Existence of entropy solutions for anisotropic quasilinear degenerated elliptic problems with hardy potential
13h45-14h05	**K. Moutaouakil**, J. Bennouna, B. El Hamdaoui and M. Mekkour, Entropy solutions for nonlinear parabolic unilateral problems with diffuse measure data
14h05-14h25	**H. EL-YAHYAOUI**, E. AZROUL, Existence of solutions for a class of elliptic systems in general fractional space
14h25-14h45	A. ALLA HAMOU, E. AZROUL, **S. BOUDA**, M. GUEDDA, A fractional epidemiological system modeling HIV transmission in a heterosexual population
	Session 3: EDP & AF **Chairman: H. Moussa**
11h15-11h35	**R. Elarabi**, On some nonlinear elliptic problem inanisotropic orlicz-sobolev spaces
11h35 -11h55	**Y. EZZAKI**, J. H'MICHANE AND O. ABOUTAFAIL, On the class of order semi-Fredholm operators
11h55-12h15	**O. AZRAIBI**, M. BOURAHMA, A. BOUZELMATE, B. EL HAJI and M. MEKKOUR, On the some equations inequalities in Musielak- Orlicz spaces with measure data
12h15-12h35	A. ABERQI, M. EL MASSOUDI and **A. EL OUARDANI**, On some Evolution Systems in Museilak-Orlicz space
12h35-12h55	**L. Essafi** and M. Bouallala, Study of a contact problem with normal compliance in reflexive Orlicz spaces
12h55-13h15	**Y. Ahmida** and A. Youssfi, On monotone operator theory for nonlinear elliptic equations in Musielak spaces
13h15-13h25	**H. MONAIM** and S. FAHLAOUI, General One-dimensional Clifford Fourier Transform and Applications to Probability Theory
13h25-13h45	**R. Oubrahim**, Fixed point theorems in extended b-Menger space and application
13h45-14h05	M.B. Benboubker, **R. Bentahar** and H. Hjiaj, Existence of solutions for some degenerate elliptic equation with Hardy potential and Fourier boundary conditions
14h05-14h25	**N. Moujane**, M. El Ouaarabi and C. Allalou, Existence of three solutions to a p(x)-Laplacian-Like Robin problem
14h25-14h45	**A. Daife**, E. Azroul, Results for some nonlinear elliptic systems in Sobolev spaces with perturbed form
14h45-15h05	**F. AFKIR** and A. ELBOUR, Domination problem of weak limited operators on Banach lattices