# Workshop Program

**Place of organization:**

- ➢ **Monday, May  22 2017: National School of Applied Sciences Fez (maps)**
  Tutorial courses and the Plenary Conferences will take place in the conference room.
- ➢ **Tuesday and Wednesday, May 23-24 2017: Faculty of Sciences and Techniques Fez (maps)**
  Tutorial courses and Plenary Conferences will take place in the conference room.

| Monday May 22, 2017 | |
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| 08 :00 - 09 :30 | Welcome Registration & Workshop Opening |
| 09 :30 - 11 :00<br>Chair :<br>**A. Saka** | Tutorial course 1 : Conference Room (ENSA)<br>Title: Assimilation des données pour les problèmes d'évolution<br><br>**M.  Asch** |
| 11 :00 - 11 :30 | Coffee break |
| 11 :30 - 13 :00<br>Chair :<br>**A. Saka** | Tutorial course 1 : Conference Room (ENSA)<br>Title : Assimilation des données pour les problèmes d'évolution<br><br>**M.  Asch** |
| 13 :00 - 14 :00 | Lunch |
| 14 :00 - 15 :30<br>Chair :<br>**E. Azroul** | Tutorial course 2 : Conference Room (ENSA)<br>Title: Équations de Navier-Sokes<br><br>**M. El Hammoumi** |
| 15 :30 - 17 :30<br>Chair :<br>**A. Touzani** | Tutorial course 3: Conference Room (ENSA)<br>Title : Equations de Stokes et de Navier-Stokes avec des conditions aux limites physiques<br><br>**C. Amrouche** |
| 17 :30 - 18 :00 | Coffee break |

| Monday May 22, 2017 | | | |
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| | **10** Presentation | **5** Questions | |
| | Room :1. Chair : **E. Azroul** | Room :2. Chair : **J. Bennouna** | Room :3. Chair : **A. Touzani** |
| **Communications**<br><br>18 :00 - 19 :00 | 1. **A. Mennouni** On solving some integral equations appearing in continuum mechanics<br>2. **S. Bakht, N. Idrissi Fatmi** Study of class of reaction-diffusion system: Modelisation, Mathematical Analysis and Numerical Simulation<br>3. **A. Hakem** Global existence and Asymptotic stability for a coupled visco elastic wave equation with a time-varying delay term<br>4. **H. Torbi, N.Salhi , H.Talbi** Numerical resolution of unsteady Navier Stokes equations by finite volume<br>5. **N. Idrissi Fatmi** A model of Nickel-Iron alloy electrode position on rotating disk electrode The global existence in the quadratic case | 1. **J. Eddaoudy, T. Bouziane** study of different materials by numerical meshless method (LRPIM)<br>2. **A. Asserghine, M. El Kaouini, H. Chatei** Numerical Modeling of Q- nonextensive Plasma Sheath<br>3. **M. Grari, Z. CifAllah** Numerical modeling of Plasma discharge in Capacitive Coupled Plasma reactor<br>4. **K. Chahour, R. Aboulaich, A. Habbalb, C. Abdelkhirane** Numerical simulation of the fractional flow reserve FFR<br>5. **M.R. Amattouch, H. Belhadj, N. Nagid** A modified fixed point method for the transport equation in porous media | 1. **R. Hajjami, A.Lahrouz, M.El Jarroudi** Stability and Hopf bifurcation of a Delayed Epidemic Model With Vaccination<br>2. **A. Boukhsas, A. Zerouali , O. Chakrone , B. Karim** Generalized eigenvalue problems for $(p, q)$-Laplacian with Nonlinear Boundary Conditions and indefinite weight<br>3. **A. Nagib, M.D.M. Alaoui, A. Touzani, A. El Khalil** Solutions for eigenvalue problems involving $(p(x), q(x))$-Laplace Operators<br>4. **O. Sidi Hamed, E. Essoufi** Inverse diffusion problems for degenerate/singular parabolic equations |

AEPCM'2017
1st Workshop on Advances in Evolution Problems and Continuum Mechanics
May 22-24, 2017, Fez-Morocco

| Tuesday May 23, 2017 | |
|---|---|
| 08 :00 - 09 :00 | Welcome Registration & Workshop Opening |
| 09 :00 - 10 :45<br>Chair :<br>**A. Benkirane** | Conference: Conference Room (FST)<br>Title : Initial trace of positive solutions of some nonlinear diffusion equations<br><br>**L. Véron** |
| 10 :45 - 11 :00 | Coffee break |
| 11 :00 - 12 :45<br>Chair :<br>**D. Meskine** | Conference: Conference Room (FST)<br>Title : Non-Newtonian fluids in the setting of Orlicz spaces.<br><br>**A. Świerczewska-Gwiazda** |
| 12 :45 - 15 :00 | Lunch |

| Tuesday May 23, 2017 | |
|---|---|
| 15 :00 - 16 :30<br>Chair :<br>**A. Benkirane** | Conference: Conference Room (FST)<br>Title : Elliptic and parabolic problems in Orlicz spaces.<br><br>**P. Gwiazda** |

| | **Presentation** | | **Questions** | |
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| | Room :1. Chair :**S. El Wardi** | Room :2. Chair :**J. Bennouna** |
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| **Communications**<br><br>16 :30 - 18 :45 | 1. **Y. Ahmida, A. Youssfi**<br> Some approximation results in Musielak-Orlicz spaces<br>2. **A. El Akkad, A. ElKhalfi,**<br> A Posteriori Error Estimator for Unsteady Navier- Stokes equations<br>3. **M.M. Ould Khatri, A. Youssfi**<br> On a boundary trace embedding result in Musielak-Orlicz spaces and application<br>4. **M. El Massoudi, A. Aberqi, J. Bennouna**<br> Nonlinear elliptic unilateral problems in Musielak spaces<br>5. **O.S.M. Deval, A. Benkirane, M. Ait Khellou**<br> On the regularity of solutions to the Poisson equation in Musielak-Orlicz spaces<br>6. **S. Taarabti, Z. El Allali , K. Ben Haddouch**<br> Multiple solutions for nonlocal fourth-order systems of $(p(x), q(x))$-Kirchhoff type<br>7. **M. Bouallala, M. Alaoui, El.-H. Essoufi**<br> On convergence of the penalty method for Signorini'sproblem with Tresca's friction in thermo-electro-viscoelasticity | 1. **M. Dammak, M. El Ghord, S. Kharrati**<br> Biharmonic equations with asymptotically linear nonlinearities and Steklov boundary conditions<br>2. **M. Abdellaoui, E. Azroul**<br> Non-linear elliptic problems with no continuous lower order terms in generalized Sobolev spaces<br>3. **A. Saidi, O. Chadli**<br> An equilibrium problem approach for the existence of anti-periodic solutions for nonlinear implicit evolution equations<br>4. **Talha, A. Benkirane, M. El Moumni**<br> Existence of Renormalized Solutions for Some Elliptic Problems in Musielak-Orlicz spaces<br>5. **A. El Mahraoui, A.R. El Amrous,**<br> Infinitely many solutions of anisotropic problems with variable exponents<br>6. **R. Jaidane, M. Dammak, C. Jerbi**<br> Positive solutions for an asasymptotically linear biharminic problem |
| 18 :45 - 19 :00 | Coffee break | |

| Wednesday May 24, 2017 | | |
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| 08 :45 - 10 :15 Chair : **A. Touzani** | Conference: Conference Room (FST) Title :Dynamics and effective viscosity of spherical magnetotactic bacterium suspensions **M. Guedda** | |
| 10 :15 - 10 :30 | Coffee break | |
| **Communications** 10 :30 - 12 :30 | **Presentation**     **Questions** | |
| | Room :1.  Chair : **E. Azroul** | Room :2.  Chair :**A. Touzani** |
| | 1. **A. Jabbour,  A. Bouidi** Global existence and numerical simulation of shearing motions of vicoelastic fluids of Oldroyd type 2. **L. Kabboura,  A. Bouidi** Determination of radial stationary solutions of Couette-Taylor flow 3. **L. Zmour,  A. Bouidi** Global existence and uniqueness of solutions for non stationary incompressible fluid 4. **H. Zouiten,  A. Boutoulout,  F.Z. El Alaoui** On the boundary observability with constraints on the gradient 5. **H. Talbi,  N. Salhi,  H. Torbi** Finite volume numerical simulation of free surface flows 6. **A. Aberqi, M. Elmassoudi,  J. Bennouna** On some non-coercive nonlinear elliptic equations, with two lower order terms | 1. **A. Qabil,  A. Baalal** Existence of multiple solutions for a $p(x)$-biharmonic and $p(x)$-Laplacian equation 2. **M. El Hawmi,  H. Hjiaj,  A. Touzani** Existence of solution for somenonlinear and non-coercive anisotropic elliptic problem with $L^1$-data 3. **B. Lahmi,  A. Youssfi** Nonlinear parabolic equations with non standard growth and $L^1$-data 4. **M. Ait Hammou,  B. Lahmi,  E. Azroul** Topological Degree applied to Partial Differential Operators in Sobolev Spaceswith Variable Exponent 5. **A. Sani, C. Hilmi** $\pi$-integration: Incontournability of the uniformity on the amplification parameter 6. **K. Zaki, H. Redwane** Nonlinear parabolic equations with diffuse measure data |
| 12 :30 - 14 :30 | Lunch | |

| Wednesday May 24, 2017 | |
|---|---|
| 14 :30 - 16 :30 Chair : **A. Saka** | Conference: Conference Room (FST) Title :Equations de Stokes et de Navier-Stokes avec des conditions aux limites physiques <br><br> **C. Amrouche** |

| | **Presentation** | **Questions** |
|---|---|---|

| **Communications** <br><br> 16 :30 - 18 :00 | Room :1. Chair :**A. Touzani** | Room :2. Chair : **J. Bennouna** |
|---|---|---|
| | 1. **K. Choukrallah, F. Lmai, S. Derkaoui** <br> Development and Characterization of Solar Cells Based on Perovskite Materials <br> 2. **S. Touhami, A. Chaira** <br> On RKHSs of real harmonic functions on Lipschitz domains <br> 3. **S. Ziani, A. Jbari, L. Belarbi** <br> Fetal Electrocardiogram Extraction by means of Independent Component Analysis ICA <br> 4. **L. Maniar , M. Oumoun** <br> Feedback stabilization for affine in the control stochastic systems <br> 5. **S. Hadiri** <br> Backward Stochastic Differential Equation with Levy Processes and Partial Integro-Differential Equation <br> 6. **F. Bakrim, H. El Maroufi, T. Ziad,** <br> Parameter Estimation in Stochastic Differential Mixed-Effects Models | 1. **R. Bahloul** <br> Periodic solutions of partial degenerate differential equations with n delay <br> 2. **M. Kabbaj, J. Bennouna, B. Elhamdaoui** <br> Non-linear elliptic problems with no continuous lower order terms in generalized sobolev paces <br> 3. **A. Sanhaji, A. Dakkak** <br> Nonresonance Conditions on the Potential for a Neumann Problem <br> 4. **Y. Errai, Marhrani , Aamri** <br> Generalized contractions on two partial metricspaces <br> 5. **D. Hajira, A. Chahbi, S. Kabbaj,** <br> Stability of generalized quadratic functional equation on a set of measure zero <br> 6. **M. Ousbika, Z. El Allali** <br> Multiple solutions for a discrete fourth order boundary value problem with three parametres |
| 18 :00 - 18 :30 | Coffee break | |