

Numerical Analysis AND Optimization Days (JANO'13)

Khouribga, February 22-24, 2021

MS10. Modeling and Numerical Analysis of Flow and Transport in Porous Media.

Organizers: **Brahim Amaziane** (UPPA, France) & **Mustapha El Ossmani** (UMI, Morocco)

Wednesday, February 24, 2021 (11h--13h & 14h--16h)

n°	Title and Authours	Time table
1	C. Rosier: Derivation of Dupuit-Richards model taking into account the fluid compressibility.	11h00--11h20
2	Z. Mghazli: Contributions on Mathematical modeling of the biodegradation in porous media.	11h25--11h45
3	E. H. Quenjel, M. Saad , M. Ghilani: Positive DDFV scheme for degenerate parabolic equations	11h50--12h10
4	L. Amir and M. Kern: Reactive transport modeling in porous media with a Newton-Krylov method	12h15--12h35
5	E. Ahusborde , B. Amaziane, M. El Ossmani and M. Id Moulay, Finite volume schemes for two-phase reactive flows in porous media.	12h40--13h00
LUNCH BREAK		
6	B. Amaziane, M. El Ossmani and K. Talali: Convergence of a finite volume scheme and numerical simulations for a sharp-diffuse interfaces model for seawater intrusion in a free aquifer.	14h00--14h10

7	S. Slimani , M. Farhloul, I.Medarhri, K.Najib and ,A.Zine: A mixed finite element method for a seawater intrusion problem in confined aquifer.	14h15--14h25
8	Y. Lakhlifi, , S. Daoudi , I. Kissami and I. Elmahi: A numerical model for predicting sea-surface temperature distribution in the strait of Gibraltar	14h30--14h40
9	A.Kaouachi , S. Daoudi, I. Kissami and I. Elmahi: A Two-dimensional Numerical Model for Debris Flow Simulations.	14h45--15h55
10	Y. Lakhlifi , S. Daoudi, I. Elmahi and A.Yachouti: Numerical modeling of hydrodynamic and contaminant transport in the strait of Gibraltar	15h00--15h10
11	Y. Abouelhanoune and M. El Jarroudi: Numerical transport for a non aqueous-phase organic liquid in porous media.	15h15-15h25
12	M. EL Hatri and R. Ghenji : Numerical approximation for an axisymmetric flow stationnary Navier-Stokes fluid coupled with the energy.	15h30-15h40