



Minisymposium contact: philippe.poncet@univ-pau.fr

Minisymposium

Title: On mathematical and numerical modeling of some problems in water resources.

Organizer: Carole Rosier, LMPA, Université du Littoral Côte d'Opale, France

During this mini-symposium we present different aspects and points of view concerning modeling of groundwater. The first part of the session is centered on the modeling and on mathematical questions concerning problems in water resources such as the seawater intrusion in coastal aquifers or the climatic impact on water table. Then we focus on numerical aspects and we present tools and numerical methods designed to solve accurately and efficiently these problems.

Talk 1 : Three dimensional model upscaled mixed sharp-diffuse models for saltwater intrusion. Numerical results.

Diédhiou M. (1)

(1) MIA, Université de La Rochelle.

Talk 2 : Modeling of elevation of water table in coastal aquifer.

Bourel C. (1)

(1) ILMIPA, Université du Littoral Côte d'Opale.

Talk 3 : Discretization of unsaturated flows in heterogeneous anisotropic porous media on general grids preserving the gradient flow structure.

Cancès C. (1)

(1) Laboratoire J. L. Lions, UPMC Université Paris 06.

Talk 4 : Finite volume method for a seawater intrusion problem.

Najib K. (1)

(1) LENS M, Rabat.

Talk 5 : On the specificity of the linear systems coming from geochemical modeling.

Carrayrou J. (1)

(1) Lab. d'Hydrologie et Géochimie, Université de Strasbourg.