

Simulation pour les stockages souterrains

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Porous media flow and transport have many applications such as far field simulations of underground nuclear waste disposal, geological storage of CO₂, or reservoir engineering... A salient feature of subsurface flow and transport processes is the heterogeneity of the medium with physical properties ranging over several orders of magnitude. Other challenges presented by these models involve widely differing space-time scales. Accurately resolving these features requires fine meshes, and thus the solution of large systems. The aim of this minisymposium is to bring together scientists working in this field to report about recent developments. Work presented will range from space-time domain decomposition methods, solvers and HPC for nuclear waste management, reactive two-phase flow simulations and CO₂ storage, and a posteriori estimates for two-phase flow problems.

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