

INVITATION TO THE LECTURE

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9:30

CONFERENCE ROOM

MODELLING PROCESSES IN POROUS MEDIA II: FROM POROELASTICITY TO POROPLASTICITY

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The Lagrangian and Eulerian saturated poroelasticity models will be extended to poroplasticity ones in this talk. Firstly, the balance equations and water constitutive relationships will be recalled. Then, the plastic behaviour of a porous material will be described and the poroelastic constitutive relationships will be extended to poroplastic ones. Complete governing equations will be derived. Finally, general ideal and hardening poroplastic constitutive models will be presented and the case of matrix plastic incompressibility will be discussed.