

# SEMINARIO DE ANÁLISIS Y APLICACIONES

Viernes, 6 de julio de 2012

11:30 h., Módulo 17, Aula 520 (Departamento de Matemáticas, UAM)

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Quasistatic Evolution in Non-Associative  
Plasticity.

## Resumen:

In this joint work with Jean-François Babadjian and Gilles Francfort we impart a variational structure upon the model of non-associative plasticity, which is the reference model for soil and rock mechanics and is usually considered not to be tractable from a variational standpoint. We prove the existence of a quasistatic evolution for such a model under a natural capping assumption on the hydrostatic stresses and a less natural mollification of the stress admissibility constraint. The obtained elasto-plastic evolution is expressed for times that are conveniently rescaled.

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