

U LISBOA UNIVERSIDADE

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μ Grupo de Física Matemática da Universidade de Lisboa

Faculdade de Ciências da Universidade de Lisboa

GFM AND **CMAFCIO SEMINAR**

Dia 10 Dezembro 2019 (terça-feira), às 13h30, sala 6.2.38

A two-phase two fluxes degenerate Cahn-Hilliard model as constrained Wasserstein gradient flow

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(Inria Lille – Nord Europe)

Abstract: We present an original model for immiscible two-phase mixtures. This model can be interpreted as the generalised gradient flow of the same energy as for the classical degenerate Canh-Hilliard model, but for a different geometry. Our model is shown to dissipate faster. Existence of weak solutions is established based on the convergence of a JKO semi discretization (joint work with Flore Nabet and Daniel Matthes).



Local: FCUL - Edf. C6 - Piso 2, 6.2.33