

Singularities in PDE and the calculus of variations

Singularités en EDP et dans le calcul des variations

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Viscoelastic materials

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Abstract

In this talk, I will present several system of incompressible viscoelastic materials. The models are derived from energetic variational procedures. The examples include liquid crystals, micro-macro polymeric models and nonlinear viscoelastic fluids. I will emphasize on the analytical/wellposedness issues of the systems.