



Tuesday the 22 January 2019 at 15:00 Politecnico di Torino, DISMA, Aula Buzano (third floor)

Edoardo MAININI

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A phase field approach to Eulerian interfacial energies

Prof. Riccardo Adami introduces the seminar

Abstract

In this seminar, Dr Mainini will analyze a nonlinear elasticity model for a two-phase material, in which the interface is measured in the deformed configuration. To this aim, sets of finite perimeter will be characterised in relation to Sobolev deformation mappings. Dr Mainini will discuss a functional frame allowing for the existence of minimisers and Gamma-convergence of approximating diffuse-interface functionals.

Biography

Edoardo Mainini is a Research fellow at Università degli Studi di Genova. After his higher education at Politecnico di Milano, he obtained his PhD in Mathematics in 2010 from Scuola Normale Superiore di Pisa. He worked as a Post-doc at Università di Pavia and Université Paris 11.

His research interests include Calculus of Variations, Nonlinear Evolution Equations, Optimal Transport, and Mathematical Methods in Materials Science.