

Centro de Investigação em Matemática e Aplicações Departamento de Matemática

Seminário

7 de Outubro de 2010, Quinta-feira CLAV – Anf. 1 - 14:00 horas

The education of shape memory alloys

Nikolai Chemetov

CMAF, Universidade de Lisboa

Resumo

Shape memory alloys can exhibit one shape memory effects or two shape memory effects. The latter one results from the education of the shape memory alloy, i.e. the progressive modification of the admissible mixtures of martensites and austenite. This modification is produced by convenient thermal and mechanical treatments of the alloy. We discuss a predictive theory of this phenomenon and show the solvability of a corresponding mathematical model.