



MAFIA - the seminar you can't refuse

## **Bounds on complex eigenvalues for perturbed Lamé operator with complex potentials**

**Lucrezia Cossetti**

Sapienza - Università di Roma

November 7, 2017

13:15–14:15

in T115/C

Fakulta jaderná a fyzikálně inženýrská ČVUT  
Trojanova 13, 12000 Praha

**Abstract:** Several recent papers have focused their attention in proving the correct analogue of Lieb-Thirring inequalities for non self-adjoint operators and in finding bounds on the distribution of their eigenvalues in the complex plane. In this seminar we will see some recent improvements in the state of the art of this topic. Precisely we address the question of finding quantitative bounds on the discrete eigenvalues of the perturbed Lamé operator  $-\Delta^* + V$  in terms of the  $L^p$  norms of the potential  $V$  which, possibly, is assumed to be complex-valued.