



UNIVERSITÀ DEGLI STUDI
DI TRENTO

Dipartimento di Ingegneria Civile,
Ambientale e Meccanica



Instabilities and nonlocal
multiscale modelling of
materials

erc-instabilities.unitn.it



European Research Council
Established by the European Commission

AVVISO DI SEMINARIO

Si comunica che **venerdì 07 luglio 2017 a partire dalle ore 11.30**
si terrà presso l'aula **R2** (via Mesiano 77) il seguente seminario

Can solid mechanics and geology help to one another?

Dr. Matteo Alvaro

Università degli Studi di Pavia

How deep paleo-subduction can proceed prior exhumation, or at what depth do diamond form are the typical open question in geology that are still seeking for quantitative answers.

Mineral inclusions yield a wealth of information on many geological processes invisible at the whole rock scale, because they are protected by their host minerals that reduce or prevent post-formation alteration. These pristine mineral inclusions can be investigated using mineralogical and crystallographic tools and approaches to shed lights on fundamental open question related to rocks and mineral formation processes and the depth at which are occurring.

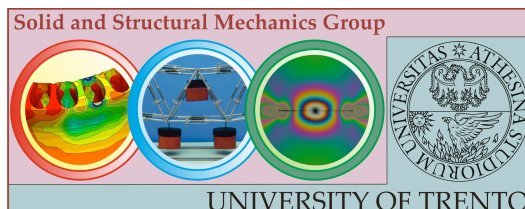
More recently geologists have started to discovery the importance of solid mechanics modelling to unravel processes that otherwise would be far too complicated to be addressed with commonly available analytical solutions (e.g. plastic and brittle deformation, shape effects, elastic anisotropy etc.)

Experimental approaches (X-ray diffraction, computed x-ray tomography microscopy, Raman spectroscopy) and numerical models can now be combined to perform a complete investigation of geologically relevant mineral host-inclusion pairs retrieving all of the hidden clues to solve the puzzle of rocks and mineral P-T paths over geological timescale.

Tutti gli interessati sono invitati a partecipare.

Il seminario è organizzato dal gruppo di Scienza delle Costruzioni

(D. Bigoni, L. Deseri, N. Pugno, A. Piccolroaz, F. Dal Corso, M.F. Pantano, R. Springhetti, D. Misseroni)



**SOLID AND STRUCTURAL
MECHANICS GROUP**

ssmg.unitn.it