



WORKSHOP

Solid inclusions in minerals as records of geological processes

Location: Hotel Admiral Palace, Rimini, Italy.

Friday 16th September 2016

Convenors: Matteo Alvaro (Pavia), Ross Angel (Padova).

Contact: workshop@mile-deep.org

Recent developments in experiment and theory allow the stress state in solid mineral inclusions to be measured accurately and precisely. This allows the measured stress states to be interpreted as entrapment conditions, thus identifying *P-T* points in the rock history. The methods involve non-linear elasticity as an extension of classical elasticity theory and are complex. The workshop will teach the principles of host-inclusion elasticity, its assumptions and limitations in its current form, and the methods for determining the stress state in and around inclusions. Hands-on exercises with the EosFit software will teach participants how to perform calculations to determine inclusion pressures and entrapment conditions.

Program and speakers:

Lecture	Introduction to non-linear elasticity (Equations of state) and how to measure stress by diffraction	Ross Angel (Padova)
Lecture	Host/inclusion elasticity for isotropic systems	Mattia Mazzucchelli (Pavia)
Lecture	Measuring stress states with spectroscopy	Lutz Nasdala (Vienna)
Hands-on tutorial	Introduction to Eosfit-7c	Matteo Alvaro (Pavia)
Hands-on tutorial	Using EosFit-7c for host-inclusion calculations	Ross Angel (Padova)
Lecture/Discussion	Limitations of the isotropic model. Short presentations on various aspects: Anisotropy and fluids, shapes, cracks	All speakers
Discussion	Future challenges and solutions	All participants

Workshop Fee: A reduced workshop fee of 30 euro per person has been made possible by generous support of sponsors.

Registration: This is a satellite workshop of the 2nd European Mineralogical Conference. Please register on the website www.mile-deep.org under the section events, or by sending an email to workshop@mile-deep.org.

Further information: www.mile-deep.org

Main conference site: emc2016.socminpet.it

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