



Elasticity and Equations of State of Solids for Earth and Material Sciences

A course for PhD students, by

Ross J. Angel, MA, PhD

Organized by the PhD School of Physics and Geology,
Perugia University

6-8 May, 2019



Topics

- Stress, strain, and linear elasticity of solids
- Hydrostatic pressure, theory of non-linear equations of state for pressure
- Determining EoS parameters from diffraction data with the EosFit software
- Temperature in equations of state

The course will be taught in English. No prior knowledge is required of elasticity or EoS. A normal level of mathematics for PhD students in sciences will be assumed.

3 credits will be awarded for having taken the course.

Logistics

- The course will start at 14:00 on 6th May, and will finish in late afternoon 8th May.
- The course is free but admission will be limited to 20 participants. To attend the course, please register with **Paola Comodi** (Dipartimento di Fisica e Geologia, Università di Perugia, Italy): paola.comodi@unipg.it
- Students should organise their own accommodation.

Lecturer

Ross Angel is a researcher in the TrueDepths project in the Department of Earth & Environmental Sciences, University of Pavia. He is a native English speaker with over 220 published papers in international scientific journals, and an *h* index of 46. The focus of his research has been the structure-property relationships of key industrial and geological materials with the aim of providing the basis for rationale materials design and understanding geological processes. The software that he has developed for diffractometer control and processing of data, including EosFit, is distributed freely from www.rossangel.net.

