

CIG_02: An Introduction to Modeling Lithospheric Dynamics (1/2-Day Workshop)

Conveners: John Naliboff¹

Co-chairs: John Naliboff

¹Earth and Planetary Sciences, University of California, Davis, CA, 95618
E-mail: jbnaliboff@ucdavis.edu

Session Description

This session will provide a tutorial and training for modeling mantle convection and lithospheric deformation using the state-of-the-art, CIG-supported code ASPECT. The half-day session will begin with a general overview of relevant numerical methods and best practices for modeling complex, non-linear solid Earth deformation. After the introduction, participants will complete hands-on exercises that examine realistic geophysical problems including mantle convection, subduction and lithospheric extension. The session will conclude with a discussion of the exercises and questions regarding developing future numerical studies. Participants are encouraged to come prepared with ideas and hypothesis potentially suited for numerical investigations. No prior modeling experience is required and all interested student, faculty, professional research and industry attendees are encouraged to apply.

Primary Affiliation: CGU, UCD-CIG

Joint Session Submission: none