School of Earth and Environmental Sciences
Spring 2025 Colloquium Series

Wednesday, April 09, 2025
12:15 PM -1:30 PM
Science Building C-207

Zoom ID: 843 0287 5858
Passcode: 672323

Mike Gurnis

Seismological Laboratory
California Institute of Technology

The Churning Interior of Planet Earth –

A view of the Pacific over the Cenozoic

For the last 50 years, plate tectonics has been proven to be an extraordinarily successful framework for understanding processes near the surface Despite its kinematic success, uncovering the underlying dynamics and linkage of plate tectonics to the deeper mantle has proven to be more elusive.

This is exemplified by our poor understanding of the time-dependence of plate tectonics, like the formation of new plate boundaries, changes in plate direction, and a supercontinent cycle. This lecture will detail key research breakthroughs that span different disciplines from ocean drilling to global seismology, computational science, and earth physics to elucidate the forces driving plate tectonics.