

Imaging the Earth's Interior using Seismic Waves

Saturday, July 30, 2022 11:30 AM (45 minutes)

Earthquakes, ocean waves, and human activity produce seismic waves that travel through the Earth, carrying with them information about variations in elastic properties and density. Since pioneering efforts in the late 1970s, global seismic tomography has revealed structures in our planet's deep interior at increasingly greater detail. Here, I present recent progress in determining Earth's elastic and density structure, and discuss key structures at various scales. Finally, I review challenges and limitations facing seismologists in their efforts to obtain more precise images of the interior.

Attendance type

In-person presentation

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Session Classification: Workshop

Track Classification: Multi-messenger Tomography of Earth (MMTE 2022)