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# Current Understanding of Inner Core Structure and Open Questions

*Sunday, 31 July 2022 11:50 (25 minutes)*

Seismic imaging of the structure of Earth's inner core remains a challenging topic. The inner core occupies < 1% of Earth's volume and the few seismic waves that do sample it can be significantly influenced by heterogeneities in the overlying crust and mantle. Furthermore, the seismic sources and receivers used in imaging the inner core are located at or near (< 700 km depth) Earth's surface and are irregularly distributed—most seismometers are deployed on land and most earthquakes occur near tectonic plate boundaries. Here I review the current standard model of inner core structure and describe some of the outstanding questions such as topography on the inner core boundary, hemisphericity, the innermost inner core, and shear velocity in the inner core.

## Attendance type

In-person presentation

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