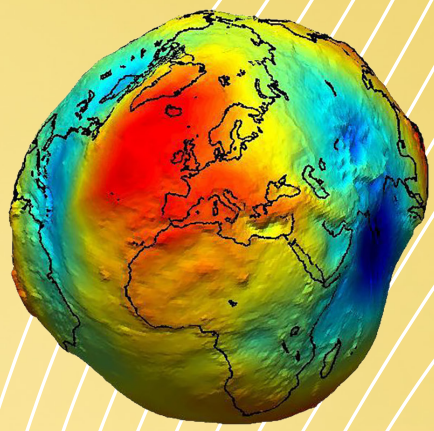
KAAPI WITH KURIOSITY

Journey Halfway to the Center of the Earth: how processes deep within the Earth shape the Earth's Surface



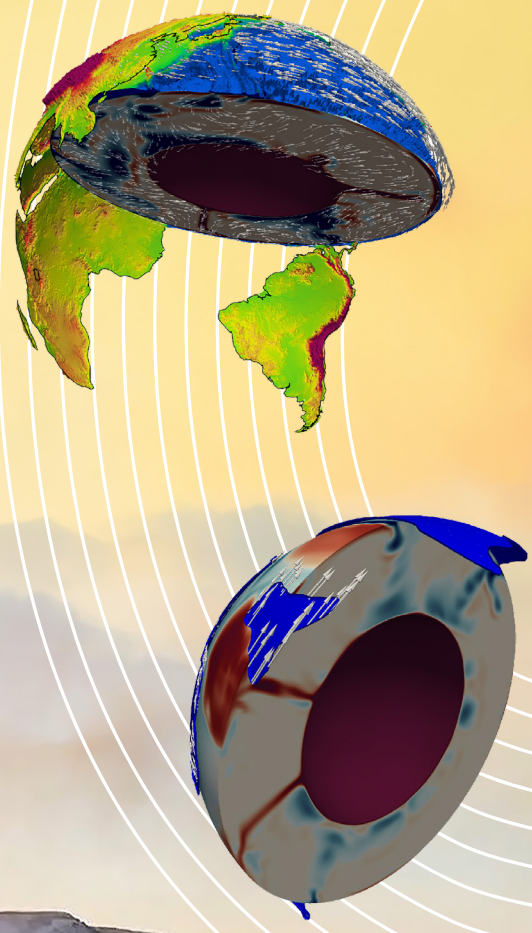
Separated from the surface by hundreds of kilometers thick blanket of rocks, the Earth's mantle is invisible to us. However, it is the convective circulation of this "solid" layer of rocks that shapes the surface of the Earth. From the formation of mountains to earthquakes and erupting volcanoes, they owe their occurrence on the processes taking place within this layer. Since direct methods cannot be used to explore this region, geophysicists use indirect ways to understand these processes. Seismic waves generated by earthquakes give some of the clearest pictures of the mantle while gravity measurements also provide important information about this region. In this talk, I will give an overview of some of the research carried out by my group to understand how the processes within the mantle can explain various phenomena occurring on the Earth's surface. A better understanding of these processes not only helps us understand how this planet has evolved with time, but can also potentially lead to better earthquake forecasting.



Attreyee Ghosh

Indian Institute of Science

Dr. Attreyee Ghosh is interested in how the deep Earth interacts with the surface. In her Computational Geodynamics lab, her group is using numerical models to understand this interaction. She earned a PhD in Geophysics from Stony Brook University, New York, and did her postdoctoral study at the University of Southern California. She is currently a professor at the Indian Institute of Science, Bangalore, where she has been working since 2012.



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Mini Auditorium

U R Rao Bhavana, Jawaharlal Nehru Planetarium, Bengaluru

Sunday, 4 PM
22 Nov 2026

Registration Link: **https://bit.ly/kwk_Nov2026**
Contact email ID: **outreach@icts.res.in**

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