

## Observing the Earth's Core with Neutrino Oscillations

*Sunday, July 31, 2022 4:35 PM (25 minutes)*

Neutrinos change flavor as they travel, and this probability depends on the density of electrons in the material they are traveling through. So, we can use neutrinos produced in the atmosphere by cosmic rays to tell us about the density of electrons in the Earth. In this talk, I will present our simulations of this phenomenon that we did in determining the sensitivity of the Deep Underground Neutrino Experiment (DUNE) to the size of the Earth's core.

### **Attendance type**

In-person presentation

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