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The Keck Institute for Space Studies
presents a short course on:

# Planetary Geodesy: Past Discoveries and Future Possibilities

## Wednesday, June 2, 2021
8:OO A.M. - 12:00 P.M. PDT
Zoom link available upon request at
www.kiss.caltech.edu

**Dr. Anton Ermakov - UC Berkeley**
What Geodesy Gave Us in the Earth-Moon System

**Prof. Ali Bramson - Purdue University**
Geophysical Observations of Ice and Climate on Mars

**Prof. Peter James - Baylor University**
Active Geological Activity on Venus from Gravity and Topography

**Prof. Francis Nimmo - UC Santa Cruz**
Detection and Characterization of Water Oceans on Icy Moons from Geodetic Measurements

Geodesy – the study of a planet's shape, orientation, and gravity field – is one of the most powerful methods for investigating planetary objects. At the Earth and the Moon, high-precision geodetic measurements have transformed geodesy from a purely geophysical tool into one that has unlocked new insights into climate change, geology, geochemistry, hydrology, and more. In this short course, we will discuss the prospects for similar giant leaps that could be enabled by modern geodetic observations beyond the Earth-Moon system, including at Mars, Venus, and Ocean Worlds.