

The Keck Institute for Space Studies presents the following lecture:

Journey to the Center of Mars

Scientific Results of the InSight Mission

Dr. Bruce Banerdt
Jet Propulsion Laboratory

Wednesday, February 22, 2023

4:30 PM Refreshments 5:00 PM Lecture

Lees-Kubota Lecture Hall Guggenheim Laboratory, Caltech

After more than 10 years of planning, design, building and testing, InSight touched down in the Elysium Planitia region of Mars on November 26, 2018. In contrast to the 45 previous missions to Mars which have (when they survived) thoroughly explored its surface features, chemistry, atmosphere, and searched for past or present life, InSight focused for the first time on the deep interior of the planet, investigating the processes of terrestrial planet formation and evolution.

Up until its demise last December from dust-covered solar arrays, it performed the first comprehensive surface-based geophysical measurements on Mars, using seismology and precision tracking to shed light on its fundamental structure, from crust to core. In Sight has provided key information on the composition and structure of an Earth-like planet that has gone through most of the evolutionary stages of the Earth up to, but not including, plate tectonics.

The Principal Investigator of the InSignt Mission will describe the mission, its science goals and some of its outstanding scientific results.