

The Keck Institute for Space Studies presents the following webinar:

How a team of young Caltech/JPL researchers transformed the field of

Earth Observation

Spaceborne Radars

Dr. Charles Elachi

Professor of Electrical Engineering and Planetary Science - Emeritus, Caltech JPL Director (2001-2016)

> Tuesday November 2, 2021 5:00 PM Lecture

Forty years ago, in November 1981, a team of young JPL scientists and engineers conducted the first experiment ever flown on the Space Shuttle. The Shuttle Imaging Radar-A (SIR-A) imaged large areas of our planet and led to the discovery of a network of ancient paleo rivers in Egypt and North Africa.

The SIR-A was followed by a series of progressively more advanced imaging radar systems (SIR-B, SIR-C and the Shuttle Radar Topography Mission), conducted by the same team, that demonstrated the scientific benefit of multispectral and interferometric systems in mapping and monitoring our planet. They formed the technical foundations for the dozen of international and commercial free flying radars presently orbiting Earth as well as the radar systems that mapped Venus and Titan.

This talk, given by the leader of that team, will cover the history of how this team conceived and accomplished these advances that dramatically expanded our ability to map and monitor the changes on our planet.

Registration is required at kiss.caltech.edu