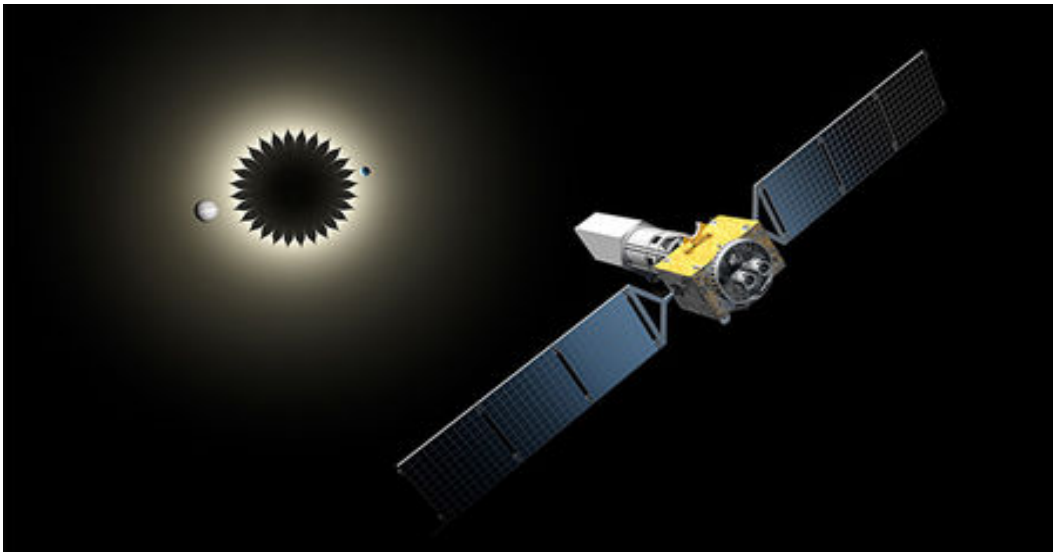


ALIEN LIFE: ARE WE ALONE IN THE UNIVERSE?

Moderators: Dottie Rosenthal & Martha
Hanner



A spaceship blocks the light from a star
revealing planets around the star to
a distant telescope
(artists rendering)

Thursday
9:30-11:30 a.m.

In 2018, researchers announced that large numbers of life forms on Earth, including bacteria, live as much as 3 miles underground. Scientists are only beginning to understand the 25 billion tons of organisms that live in the Deep Biosphere and what we can learn from them about the possibility that life can exist in environments very different from ours. Explorations of the Deep Earth and Deep Space have spurred the search for extraterrestrial life. In this seminar, we will take a close look at how scientists search for life elsewhere in the Solar System, and even beyond, and how discoveries about the Deep Biosphere help to inform our search.

We will begin with a brief history of ancient beliefs in alien life forms and trace the continuing interest in alien life to the present. We will review the basic chemistry of life on Earth and then focus on the current search for life beyond our planet, and even our Solar System. We will conclude by considering what the discovery of life beyond Earth might mean for humans and other life on Earth.

SOME POSSIBLE TOPICS
The Origin of Life on Earth
Deep Life on Earth
Extremophiles
Aliens of the Past
Exploring for Life
The Search for Intelligent Life
Aliens in Science Fiction
Exoplanets
Colonizing Other Planets