



THE PRINCETON CENTER FOR THEORETICAL SCIENCE AND THE
PRINCETON ENVIRONMENTAL INSTITUTE
PRESENT

"Is the Earth Rare?"

The question of whether complex life is exceedingly rare in the universe often arises in the context of whether habitable planets are themselves rare, if a combination of rare phenomena make the Earth, itself, habitable. The Earth's plate tectonics stabilize planetary climates. Our large moon stabilizes the Earth's tilt toward the sun. The Earth's magnetic field helps keep solar energy from stripping away the atmosphere. Large neighbors like Jupiter protect the Earth from frequent large impacts. In my talk, I will review these Rare Earth arguments and show that most, or all, of them are less troubling than Ward and Brownlee previously argued in their book "Rare Earth". That said, there could be other factors that may make habitable planets scarce. But this should not discourage us from building the types of large space telescopes that could actually answer this question.

A LECTURE BY

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Tuesday, January 22, 2013

8:00 pm

Lewis Library, Room 120

Free and Open to the Public

