

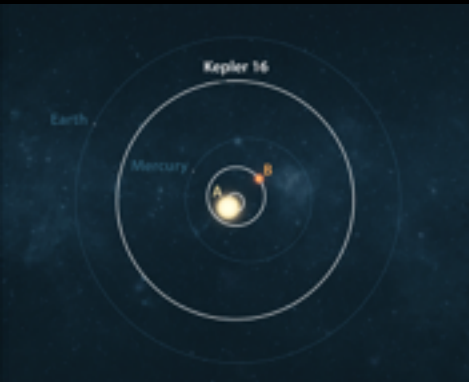
Strange New Worlds

4th Annual F. K. Edmondson Astronomy Public Lecture

Professor Josh Winn

Princeton University

Wednesday October 26, 2016, 7:30pm
Swain West 119



Did you know that it wasn't until the 1990s that scientists could be sure there were planets beyond our solar system? Since then, astronomers have discovered thousands of these planets – known as "exoplanets" – circling distant stars. This lecture will explain why it took so long to find planets around other stars, what new technologies and techniques were required, and what kind of planets have been found. Recent advances have revealed bizarre new worlds unlike anything in our Solar System, while also bringing us right to the threshold of finding other planets similar to Earth.

Professor Josh Winn

Princeton University



Josh Winn is a physicist and astronomer at Princeton University. His research goals are to explore the properties of planets around other stars, understand how planets form and evolve, and make progress on the age-old question of whether there are other planets capable of supporting life. His group tries to observe and understand the "architecture" of planetary systems, including the geometry of the orbits, and the orientation of the central star. He was a Participating Scientist in the NASA Kepler mission and is a Co-Investigator in the Transiting Exoplanet Survey Satellite, a mission scheduled for launch in late 2017. Over the years, he and his group have also pursued topics in stellar astronomy, planetary dynamics, radio interferometry, gravitational lensing, and photonic bandgap materials. In 2015, he recorded a series of 24 lectures on exoplanets, available from the Great Courses.

Josh Winn is from Deerfield, Illinois. He graduated from M.I.T. in 1994 with bachelor's and master's degrees in physics. After spending a year as a Fulbright Scholar in the UK, at Cambridge University, he returned to M.I.T. as a Hertz Fellow. While in graduate school, he worked in medical physics, condensed-matter physics, and astrophysics, and wrote for the science section of *The Economist*. He earned a Ph.D. in physics in 2001, and subsequently held N.S.F. and Hubble postdoctoral fellowships at the Harvard-Smithsonian Center for Astrophysics. He was on the M.I.T. Physics faculty for 10 years, before moving to Princeton in 2016.

Previous Edmondson Lecturers:

2015 Kathryn Johnston

2014 Martha Haynes

2013 David Morrison

The annual F. K. Edmondson Astronomy Public Lectures were established to honor the memory of Professor Frank Kelly Edmondson, a faculty member of the Department of Astronomy at Indiana University from 1937 until his retirement in 1983, and as Chair of the Department from 1944 until 1978. Professor Edmondson is remembered not only for his contributions to the study of asteroids through the Indiana Asteroid Program, but also for his dedication and service to Indiana University and to the astronomical community. The Edmondson Lectures are endowed in honor of Professor Edmondson by his family and friends.