

Boston University College of Arts & Sciences
Center for Space Physics

2017-2018 Space Physics Seminar Series

Extending our Vision to a Galaxy of Planets

The most obvious method of studying extrasolar planets - directly imaging them alongside their parent star - is also the most difficult. Image contrasts exceeding a billion to one, at subarcsecond separations, are required to detect an analog of our solar system in reflected starlight. Following the charge of the Astro2010 decadal survey, the NASA Exoplanet Exploration Program (ExEP) is tasked with developing the technology and precursor science needed to realize the goals of directly imaging Earth analogs and characterizing their atmospheres for habitability and the presence of life. In this talk I will review the history of efforts to image extrasolar planets; the methods that can be used, and technical challenges that must be met to image and characterize Earth analogs; the role of exoplanet imaging on the WFIRST mission; and how ExEP and the broader community are working to make a "New Worlds" space telescope into a ready option for the 2020 decadal survey.

Thursday, April 26 at 4:00PM
725 Commonwealth Avenue
Room 502



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