## **Boston University** College of Arts & Sciences Institute for Astrophysical Research

2017-2018 Astrophysics Seminar Series

## Imaging and Filming Black Holes with the Event Horizon Telescope

Does the black hole appear as a literally dark object if we take its picture on scales of its event horizon? This simple and intriguing question will be observationally addressed by an Earth-sized radio interferometer named the Event Horizon Telescope (EHT). The EHT has been resolving event-horizon-scales emission in the vicinity of supermassive black holes in our Galactic Center Sgr A\* and the nearby radio galaxy M87. With recent developments in its array and new interferometric imaging techniques, the EHT may be able to provide the first pictures and movies of black holes within a year from now. This talk will give an overview of the EHT and also new interferometric imaging techniques with some example applications to other radio interferometric observations such as ALMA and VLA observations of protoplanetary disks and radio stars.

Monday, March 26 at 3:30PM 725 Commonwealth Avenue Room 502





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