

September 20, 2019



Through Gravity's Looking Glass

Dr. Charles Keeton
Rutgers University

Modern telescopes let us see almost all the way back to the beginning of the Universe. But they need a boost from "cosmic telescopes" - massive clusters of galaxies whose gravity bends light and magnifies our view of the distant universe.

October 18, 2019



NASA's New Planet-Finding Mission

Dr. Joshua Winn
Princeton University

Last year, NASA launched a new space telescope, the Transiting Exoplanet Survey Satellite (TESS), to undertake the most comprehensive survey to date of eclipsing planets in our neighborhood of the Milky Way.

November 15, 2019



Unraveling Galaxy Evolution With Peculiar Galaxies

Dr. Tjitske Starkenburg
Flatiron Institute

Galaxies form, grow, and change depending on their cosmic environment as well as their structure. Studying, in particular, some uncommon galaxies provides us with a unique view on the physical processes underlying galaxy evolution.

After the lectures join us back at Sperry Observatory for refreshments and observing.

December 20, 2019



New Frontiers in Planet Formation

Charles Law
Harvard University

Planets form out of the primordial gas and dust surrounding newly-formed stars. Groundbreaking images from radio telescopes, such as ALMA in Chile, have now begun to reveal this process in unprecedented detail.

January 17, 2020



Icy Worlds: The Search for Extraterrestrial Life Heats Up

Zoe Learner Ponterio
Spacecraft Planetary Imaging Facility

While still investigating the possibility of past or even present life on Mars, astrobiologists are expanding their search to the icy moons of the outer giant planets that are well outside the Sun's "habitable zone".

February 21, 2020



An Archaeological Road Trip with the Keck

Dr. Evan Kirby
Caltech

The Keck telescopes have gone on an archaeological road trip to the most remote neighborhoods of our Galaxy. These neighborhoods are peppered with mini-galaxies-within-a-Galaxy that are quite sparsely populated with just a few handfuls of stars.

Business meetings begin at 8 PM in the Roy Smith Theatre on the main campus of UCC. Lectures follow at 9 PM.

March 20, 2020



Galaxies as Star-Forming Engines

Dr. Blakesley Burkhart
Rutgers University

Turbulence in the interstellar medium affects many key processes including star formation. The rate at which stars form can be calculated from the understanding of how turbulence and gravity affect the density of the interstellar medium.

April 17, 2020



Cosmic Fireworks: Explosions of Massive Stars

Dr. Maryam Modjaz
New York University

The deaths of massive stars produce the most powerful explosions in the Universe: supernovae and gamma-ray bursts. Both explosions can leave behind objects like black holes and pulsars, that like beacons, are visible across the Universe.

May 15, 2020



Members' Research Projects

AAI Members

AAI reserves this month's lecture for speakers from among our membership. These members will share their year's research activities, discuss endeavors in astro-imaging, telescope making projects, as well as other astronomical enterprises.

For more information including possible schedule or venue changes please visit www.asterism.org