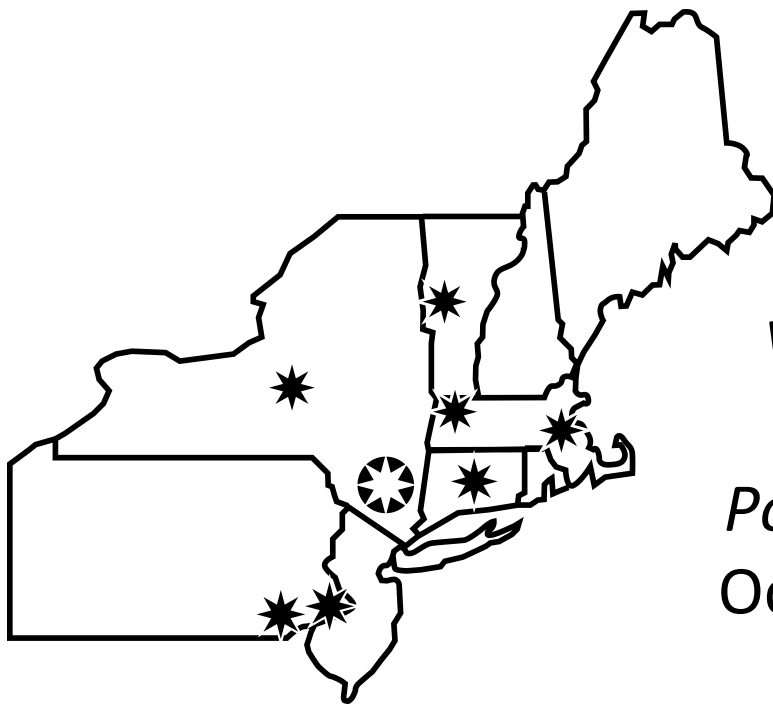


The Keck Northeast
Astronomy Consortium
30th Annual
**Undergraduate Symposium on
Research in Astronomy**



Vassar College

Poughkeepsie, NY
October 4-5, 2019

Debra Elmegreen and Colette Salyk, Vassar College
Conference Organizers



Schedule

Friday, Oct 4

- 3:00pm-6:00pm Lodging check-in
Days Inn or Alumnae House
- 6:00pm-7:00pm Meeting check-in/appetizers
Aula in Ely Hall
- 7:00pm-9:00pm Dinner
Aula in Ely Hall
- 9:00pm-11:00pm Sky Observing (weather permitting)
Class of 1951 observatory

Saturday, Oct 5

- 6:00am-8:00am Breakfast/check-out
Days Inn or Alumnae House
- 8:30am-10:15am Opening Remarks, Session I, and Poster Presentations
Sanders Classroom Auditorium (room 212)
- 10:15am-11:00am Coffee/tea/refreshments with Posters
Bridge building
- 11:00am-12:30pm Session II
Sanders Classroom Auditorium (room 212)
- 12:30pm-1:30pm Lunch
Bridge building
- 1:30pm-2:15pm Breakout sessions
Sanders Classroom (various classrooms)
- 2:15pm-3:00pm Coffee/tea/refreshments with Posters
Bridge building
- 3:00pm-5:00pm Session III and Closing Remarks
Sanders Classroom Auditorium (room 212)

Student Research Presentations

Session I: 8:30am-10:15am. Moderator: Kim McLeod, Wellesley College

Supernova Remnants in M51: A Spectroscopic Analysis to Confirm and Catalog Supernova Remnants in the Whirlpool Galaxy

Sadie Coffin, Middlebury College

Analysis of X-ray emission from Zeta Puppis

Lamiaa Dakir, Bryn Mawr College

A Principle Component Analysis of the HI Mass Fraction of Galaxies in the MaNGA Survey

Sean Dillon, California State University, Chico

Optical Properties of Low-Redshift Star-Forming Galaxies with Potential Lyman Continuum Escape

Nicole Ford, Williams College

Calibration of HI Data from the Green Bank Radio Telescope

Julian Goddy, Haverford College

Are Nearby Asteroids Made of Common Meteorites?

Alexander Henton, Wesleyan University

What's All that Noise? An Investigation of the Faint Radio Properties of Quasars

Lauren Fossil, Williams College & Ché Bradley, Middlebury College

Session II: 11:00am-12:30pm. Moderator: Eric Jensen, Swarthmore College

Warping and Turbulence in the Protoplanetary Disk Surrounding HD 100546

John Inoue, Williams College

Classifying X-ray Binaries with Machine Learning

Olive Koren, SUNY New Palz & Elaine Wang, Colgate University

Investigating Barred Galaxies in Galaxy Zoo 3D

Nathan Wolthuis, Haverford College

Fitting Protoplanetary SEDs with Surrogate Modeling

Elizabeth Teng, Haverford College

Searching for Periodic Brightenings of Double Lined Spectroscopic Binaries with Accretion Disks From TESS

Elizabeth Warrick, Bryn Mawr College

Double Trouble: The Search for Dual Quasars

Daniel Gause, Middlebury College & Lindsey Gordon, Wellesley College

Session III: 3:00pm-5:00pm. Moderator: Seth Redfield, Wesleyan University

Derivation and Implementation of the Line Profile Model of O Stars X-ray Emitting and Absorbing Stellar Wind

Jiaming Wang, Swarthmore College

Galaxy Zoo: 3D Star formation in Spiral Arms

Shoaib Shamsi, Haverford College

Measuring the Mass of a Brown Dwarf in the Debris Disk of HD 206893

Ava Nederlander, Wesleyan University

Asteroids-for-all: Building Open-source Detection Linking Software
Nicole Tan, Wellesley College

If You Give the Sun a Telescope: Imaging Alien Earths as Seen by the Solar Gravitational Lens
Mason V. Tea, Wesleyan University

Preliminary Results from the 2019 Total Solar Eclipse in Chile
Christian Lockwood, Williams College

HD106906 Debris Disk Morphology and Origin of an External Perturber
Rachel Marino, Wesleyan University

Stellar Population Ages in Green Pea Galaxies
Connor Marti, Williams College

Poster Presentations

Design and Potential of a Compact Low-Cost Reflectance Spectrometer and Fluorimeter
L. Sheraden Cox, Wellesley College

ATLAS Multi-Periodic Pulsating Variable Stars
Wilber Dominguez, Swarthmore College

Overview of HI Asymmetries in Galaxies
Patricia Fofie, Williams College

Searching for Biosignature Gases in Evaporating Exoplanet Atmospheres
Terra Ganey, Wesleyan University

Development and Alignment of the Thermal Infrared Composite Imaging Spectrometer (TIRCIS) Instrument
Diego Enrique Garcia, Middlebury College

From Einstein to Chandra: An Exploration of Highly Variable AGN
Gilberto Garcia, Wesleyan University

How Undergraduates At a Sea-Level, Light-Polluted Observatory in Eastern Massachusetts can Contribute to TESS Follow-Up
Alex Granados, Nora Hoch, Fiona Powers Özyurt and Hannah Stickler, Wellesley College

Transiting Exoplanets and KELT Follow-Up at Swarthmore
Coleman Kilby, Swarthmore

Constructing a Survey of the Local Interstellar Medium using Hubble Data
Fallon Konow, Wesleyan University

Stellar Motion from Spiral Arms in an Isolated N-body Galaxy Simulation
Irene Lin, Bryn Mawr College

Observed Optical Flare of the Quasar 1308+326
John Slater, Fairuz Ishraque, Josh Liberman, Daniel Dougherty, and Miguel de los Santos, Colgate University

Mapping the Local Interstellar Medium: Using Hubble to Look Back at the ISM Along the Sun's Historical Trajectory
Hunter Vannier, Wesleyan University

Studying He Ions in Solar Wind
Karisa Zdanky, Wellesley College

Breakout Sessions

Applying to Graduate School and What to Expect in the First Year
Seth Redfield, Wesleyan University

Communicating Science
Kristina Punzi, Wellesley College

TMT and Maunakea
Kevin Flaherty, Williams College

So you wanna make a learning video game for intro astronomy...
Jeff Bary, Colgate University