



KNAC Symposium 2017 Program of Presentations



9:00am - Welcome Brian W. Casey, President of Colgate University

Session I – Galaxies, Dark Matter, and Chondrules 9:10-10:30am

The Flyby Model of Chondrule Formation

Ian Bania¹, Katie Chapman¹, Michael Henderson², & Tristan Stetson², ¹Colgate & ²Wesleyan

Studying Isocurvature Fluctuations through Galaxy Surveys

Maura Shea, Wellesley College

The Warm Dark Matter Halo Mass Function and its Smoothing Filter Dependence

Nicholas Sweeney, Haverford College

Measuring Radial Velocities of Two Stars in Horologium I

Craig Pellegrino, Vassar College

Mapping Faraday Rotation Measures onto High Velocity Cloud H288

Dominick Rowan, Haverford College

Posters and Coffee Break – 10:30am-11:00am

Session II – The Great American Eclipse, 11:00am-11:55am

Williams College Eclipse Expedition

Christian Lockwood, Declan Daly, & Erin Meadors, Williams College

Coronal Oscillations and Terrestrial Temperature Changes During the 2017 Great American Eclipse

Connor Marti & Ross Yu, Williams College

SUVI Thematic Maps: A New Tool for Space Weather Forecasting

J. Marcus Hughes, Williams College

Break Out Sessions – 1-1:50pm

Communicating Science – Little 207

Equity and Inclusion – Little 114

Bayesian Statistics & Monte Carlo Techniques – Little 201

Applying to Graduate School – Golden Auditorium

Session III – A White Dwarf, a Fundamental Constant, a Black Hole, and an Exoplanet walk into a bar... 2-3:15pm

CMB Constraints to the Spatial Variation of the Fine-Structure Constant
David Robinson & Davy Qi, Swarthmore, College

The (Circum)stellar Contribution of WD 1145+017: Monitoring Transiting Objects in the Gas Disk of a White Dwarf Star
Stephanie Bachman, Indiana University of Pennsylvania

Searching for Exoplanets with Wellesley's 24" Telescope
G. Markee, Vassar College, N. Ford, Williams College, L. Sheraden Cox, & C. Shi, Wellesley College

Intermediate Mass Black Hole Detection via Optical Variability
Ryan Adler-Levine, Wesleyan University

Coffee Break – 3:15-3:30pm

Session IV – Star Formation and Circumstellar Disks, 3:30-4:35pm

Exploring Properties of H I Clouds in Dwarf Irregular Galaxies
Clara Berger, Wellesley College

Characterizing Proto-planetary Disks Around a Young Binary in Orion
Jonas Powell, Wesleyan University

Spectral Analysis of Accretion Activity of DQ Tau
Alina Sabyr & Megan Emch, Colgate University

Constraining Dust Structure in the Protoplanetary Disks Around V4046 Sgr, MWC 480, and DM Tau
Alyssa Bulatek, Macalester College

Posters – All day!

Using Vertical Structure to Infer the Total Mass Hidden in a Debris Disk
Cail Daley, Wesleyan University

Using Eclipsing Binaries as Astrophysical Laboratories
Aylin Garcia Soto, Wesleyan University

Developing a Python Algorithm to Constrain Orbits of Young Binary Systems
Natasha Nogueira, Swarthmore College

Design and Construction of a High-Altitude Balloon Payload
Hunter Vannier, Wesleyan University