KNAC Symposium 2016
Program of Presentations

8:45am Welcome Joseph Knee, Dean of Natural Sciences and Mathematics

Session I – Circumstellar Disks and the ISM, 9-10:30am

CO Spectral Analysis of Protoplanetary Disks
Sara Vannah (Wellesley)

AU Microscopii… Macroscopically Gassy?
Zachary Lambros (Wesleyan)

Classifying Stars Behind Dense Molecular Clouds
Sarah Reid (Agnes Scott) & Muriel Drexler (Colgate)

Modelling the Kinematics of HD 100546: ALMA Evidence for a Planetary Companion?
Cail Daley (Wesleyan)

Examining Diffuse Clouds in the Local Interstellar Medium Using Mg II, Fe II, and Mn II Ions
Carolyn Morris (Colgate)

Spectral Classification of Stars by CO Absorption Strength
Max Kurzner (Colgate) & Chris Garling (Haverford)

Characterizing Interstellar Dark Molecular Hydrogen with Narrow 21-cm Emission
Marcus Hughes (Williams)

Session II – Galaxies and Stellar Remnants, 11am-noon

High Redshift Galaxy Morphology in the Hubble Space Telescope Frontier Fields
Leah Jenks (Colgate) & Brittany Tompkins (Vassar)

Determining Properties of Halo Dust for the Herschel Edge-on galaxy Survey (HEDGES)
Jacklyn Pezzato (Swarthmore)

The Arecibo Galaxy Environment Survey: The NGC 2577/UGC 4374 Galaxy Pair
Ashley Iguina (Wellesley)

The Physical Properties of Red Supergiants in M33
Madeleine Beck (Wellesley)

Session III – Black Holes, Stars, and Nebulae (oh, my!) 2-3pm

The Multi-Decade Optical Light Curve and Microvariability of Blazar OJ 287
Samantha Boni (Bridgewater State), Alina Sabyr, and Saiyang Zhang, Katie J. Chapman, and Ryan W. Stahlin (Colgate)

Spectral Energy Distributions and Eddington Ratios of Luminous, Dust-Reddened Quasars
Nathaniel Peters (Swarthmore) & Asa Phillips (Middlebury)

Understanding Planetary Nebulae at the Bright End of the Luminosity Function
Anneliese Rilinger (Williams)

Black Holes and X-Rays 101: Now You See It, Now You Don't
Aylin Garcia-Soto (Wesleyan)

Imaging Stellar Fossils in NGC 6946
Roo Weed (Middlebury)

Session IV – Planets Near and Far, 3:30-5pm

Gully Formation by Water in Hale Crater, Mars
Sean Corrigan (Colgate)

MAVEN Observations of Transition Layers in the Martian Magnetosphere
Julian Dann (Wesleyan)

Mapping the Composition of Venus' Oldest Rocks
Avi Stein (Wesleyan)

The Occurrence Rate of Hot Jupiters
Rayna Rampalli (Wellesley)

Improving the Data Reduction Process for White Dwarf Light Curves: Finding Dim Targets Near Bright Neighbors
Jennifer and Rebekah Kahn (Smith)

Lifting the Veil on KH 15D: Radio Observations and the Rise of Star B
Rachel Aronow (Wesleyan)

Posters – All day!

Intermediate-Mass Black Hole Detection via Optical Variability
Ryan Adler-Levine (Wesleyan)

Mapping Inflated Lava Flow Margins Northwest of Elysium Mons, Mars
Sam Cartwright (Middlebury)

Modeling Impact Craters on Mars and the Moon with Zernicke Polynomials
Kamile Lukosiute (Wellesley)

KELT in Action: Discovering Exoplanets Using High Precision Photometry
Casey Melton (Wellesley)

The Origins of Planet Formation: Protoplanetary Disks
Natasha Nogueira (Swarthmore)

The Correlation between HCN/H2O Flux Ratios and Disk Mass: Evidence for Protoplanet Formation
Caitlin Rose (Vassar)

Using X-Ray Binaries to Study Galaxy Interaction
Anthony Santini (Wesleyan)

Constraining Compensated Isocurvature Perturbations with the Cosmic Microwave Background
Rhiannon Smith (Swarthmore)

The Multi-Decade Optical Light Curve and Microvariability of Blazar OJ 287
Ryan W. Stahlin, Katie J. Chapman, Saiyang Zhang, Alina Sabyr (Colgate), and Samantha Boni (Bridgewater State)

The June 2016 Optical Flare of the Blazar 3C 454.3
Zack Weaver (Colgate)

Planet Occurrence Rates for K2 M Dwarfs
Girish Duvvuri (Wesleyan)