

Robert Roten, Anca Constantin, Emil Christensen, Emily Dick, Andrew Nutter, Josiah Lapolla, James Corcoran, Nathan DiDomenico, Kyle Eskridge, Anthony Saikin

Why Do We Do It?

- ★ To provide a fun and open experience to people of all ages, by showing that science can be an active, engaging, and creative process
- ★ To spark an interest in physics and astronomy in middle and high school students in particular
- ★ To provide others a chance to meet with scientists to discuss physics and astronomy and get any science related questions answered
- ★ To show that science is a viable career path filled with diverse individuals
- ★ To nurture a sense of wonder and awe at the Universe
- ★ To teach basic astronomy concepts and problem-solving skills
- ★ To empower people to be curious and to ask questions
- ★ We expect to produce a significant impact on K-12 students in general, and in particular on the home-schooled kids (~20% in the Harrisonburg/Rockingham County)

What Happens There? We and the Audience:

- ★ Conduct observations of solar activity with a Coronado telescope equipped with a safe H α filter, a sunspotter, and handheld (Project Star) spectrometers
- ★ Investigate the out-gassing properties of comets by building, cooking, and eating your own edible 'comets'
- ★ Perform simple demonstrations which illustrate the physics of conservation of angular momentum and supernovae explosions
- ★ Make asteroids and craters to test how different impactors affect crater formation

To open a dialogue, Team Awestronomy members wear signs or t-shirts with simple messages such as "Ask me about black holes" or "...about Big Bang" to encourage our audience to ask questions.

How?

- ★ 9:00 am: Meeting in the Astronomy Lab
- ★ 9:30 am: Loading up supplies in the departmental van
- ★ 10:00 am: Setting up the Science Corner at the Harrisonburg Farmer's Market
- ★ 12:30 pm: Take down our corner, pack up, and then head to lunch!



Where?

Off campus, near campus at the



Are We Successful?

We evaluate the success of our program and its impact on the community by monitoring the number of 'likes' on our Facebook page, the number of people who attend our events at the Farmer's Market and those hosted by the Department of Physics and Astronomy, as well as enrollment in local high school physics courses along with JMU freshmen enrollment originating from local high-school students.

Check out our videos at: <http://csma31.csm.jmu.edu/physics/constaax/outreach.html>

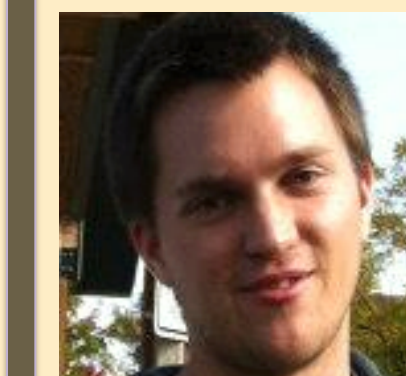
Who is Team Awestronomy?

JMU Undergraduate Physics Majors

Current Members



Robert Roten, Senior
Decade-long variability of the broad-line region in nearby active galactic nuclei



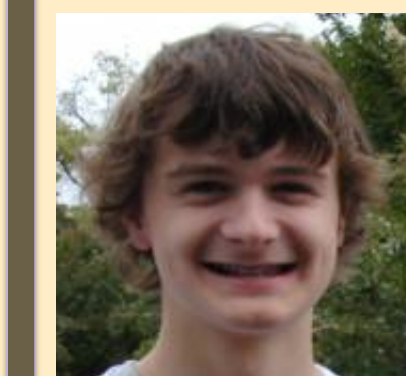
Emil Christensen, Senior
Statistical analysis of spectroscopic properties of galaxy centers Poster: 150.27 AGN, QSO, Blazars



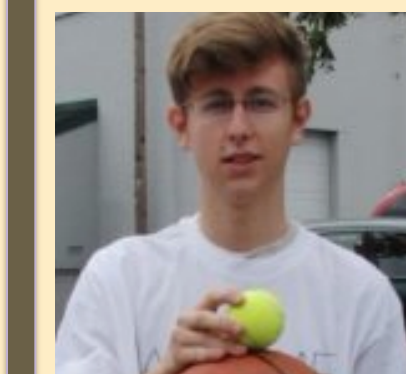
Emily Dick, Sophomore
WISE search for properties of maser and non-maser galaxies Poster: 150.24 AGN, QSO, Blazars



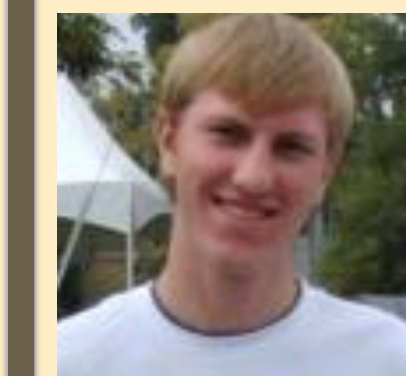
Andrew Nutter, Senior
X-ray activity of galaxies hosting water maser activity Poster: 251.09 AGN, QSO, Blazars



Josiah Lapolla, Sophomore
Multi-wavelength studies of void galaxies

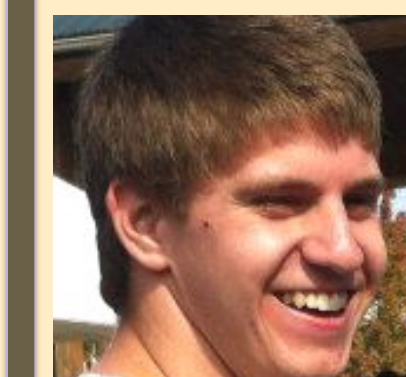


Gregory Hutchins, Junior
Particle physics with Jefferson Lab experiments



Seth Heerschap, Junior
Honors program, particle physics with hodoscope measurements at Jefferson Lab

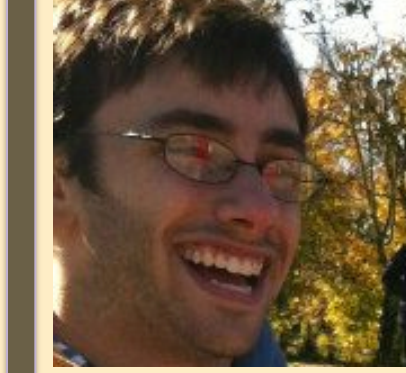
Group Alumni



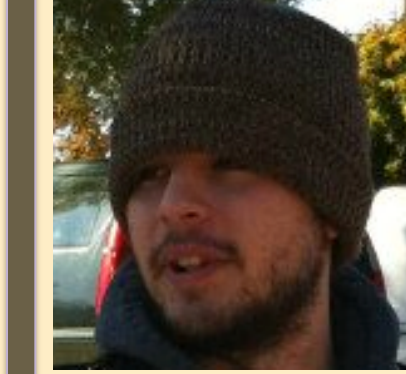
James Corcoran, Class of 2012
Analysis of the role of galactic morphology on water megamaser emission



Nathan DiDomenico, Class of 2012
Understanding the optical properties of galaxies hosting water megamaser emission



Anthony Saikin, Class of 2012
Investigations of binary stars with new observations from Lick Observatory



Kyle Eskridge, Class of 2012
Theoretical modeling of molecular lines associated with star forming regions

Faculty



Anca Constantin
Multi-wavelength observations of quasars and nearby low luminosity AGNs

With Our Online Presence We:

- ★ Post weekly updates about astronomy related news
- ★ Announce and remind our followers of future events
- ★ Post photographs and videos of each of our events
- ★ Connect to our community and reach a larger audience to receive feedback on how to improve our events
- ★ Provide an open space to get astronomy and science related questions answered
- ★ Advertise and invite our followers to free JMU Planetarium shows on Saturdays and star parties hosted by the Department of Physics and Astronomy

When does it happen?

Four times per semester on the last Saturday of each month (Weather permitting)