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Wesleyan's Mark Evans Observatory Designated Official Site

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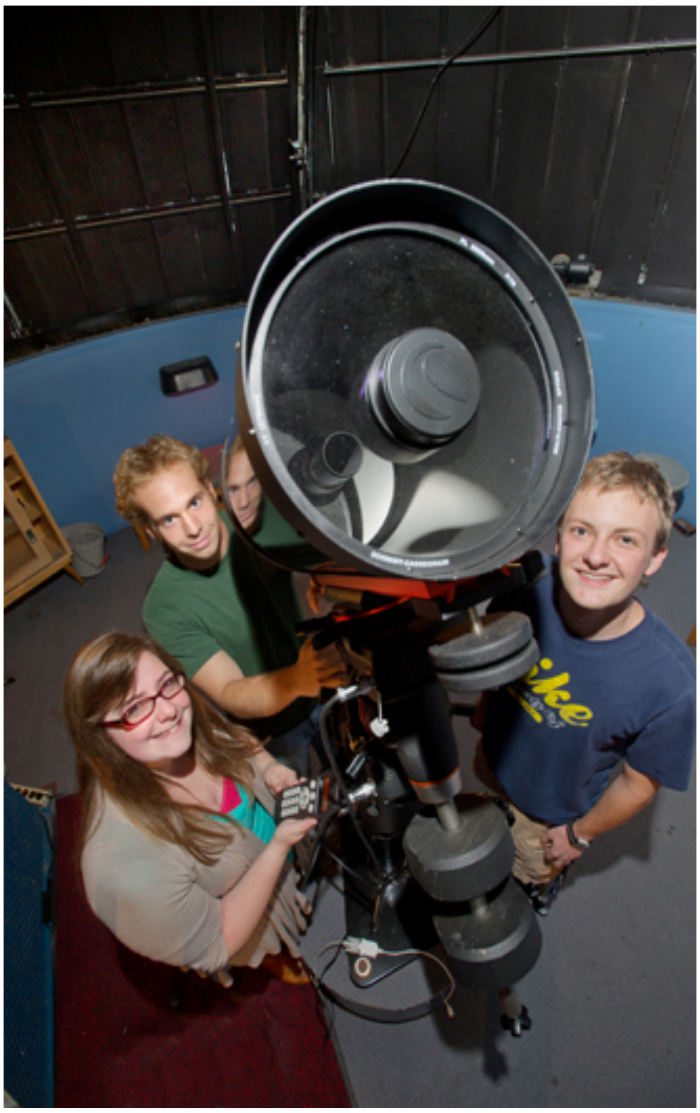
BLOOMINGTON, Ill.— Precise observations of asteroids by three Illinois Wesleyan University physics majors have resulted in the designation of the University's Mark Evans Observatory as an official observing site. The three are: Kyle Connour '15 and Chelsea Davitt '14, both of Bloomington, and Daniel LaRocca of Palatine, Ill., a 2013 graduate of Illinois Wesleyan.



Chelsea Davitt '14, Daniel LaRocca '13 and Kyle Connour '15 pose with the new telescope in the Mark Evans Observatory.

Under the direction of Chair and Professor of Physics Linda French, the three also installed a new telescope and charge-coupled device (CCD) camera at the observatory. The new telescope and camera allowed the students to make calibrated, highly precise observations to submit to the Minor Planet Center (MPC) at the Smithsonian Astrophysical Observatory, under the auspices of the International Astronomical Union. The MPC is the single worldwide location for identification, designation and orbit computation of minor planets, comets and outer irregular natural satellites of the major planets.

"With this designation our data (from observations) will go into a large database maintained by the Minor Planet Center that other scientists can use," said French.

The University's previous telescope was functional, but the new instrument and accompanying electronic camera allow students to use coordinates to precisely position the telescope.

"With the new camera, we can take pictures of galaxies in 10 seconds that you cannot see with the naked eye," said French. "So we can actually show astronomy students the objects they are learning about."

Using the new telescope and camera took practice, according to the physics majors. "We had a lot of fun looking at nebulas and other asteroids to make sure our tracking system was accurate," said Connour. By observing the same objects an hour apart over several nights, the students gained experience in aligning the telescope, balancing it and taking photos of planets, asteroids and other heavenly bodies.

Funding for the students' work this summer was provided by a 2012 National Science Foundation (NSF) grant entitled "RUI: Photometric Survey of Jovian Trojans." The grant also allowed Davitt to accompany French for an **observing trip** at the Cerro Tololo Interamerican Observatory in Chile. LaRocca was able to make observations in Chile with French last year under the auspices of the same NSF grant.

"A key part of the grant is to expose undergraduate students to know what it is like to do real research," said French.

The Mark Evans Observatory shares the official observing site designation with such renowned observatories as Cerro Tololo, the Lowell Observatory in Arizona and Mauna Kea in Hawaii.

"What's important about the designation is that we are right there next to the major observatories of the world," French said. "We may not have the number of staff and, because of our other obligations, can't work at quite the same rate they do. However, faculty and students at undergraduate institutions are capable of doing work alongside anybody."

The Mark Evans Observatory is open to the public Sunday through Thursday from 9 to 11 p.m. Check the Observatory's **Facebook** page or follow them on **Twitter** for the most accurate updates on viewing conditions. Both Connour and Davitt are among the students who work at the Observatory to assist the public at the viewing sessions.

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