



Dupont Summit 2016

Science, Technology, and Environmental Policy

December 2, Historic Whittemore House, Washington, DC

Presentation

“APUS Observatory: An Online/ Remote Telescope Dedicated to Astronomy Education and Student Research”

The American Public University System’s telescope saw "first light" early in 2016, with the first images taken and deployed within the Space Studies online classroom. Situated on top of the University’s new Information Technology building, at the heart of the observatory is a Planewave CDK24 reflecting telescope, equipped with powerful CCD imaging cameras. The observatory is the largest of its kind in West Virginia, featuring state of the art internet accessibility, allowing students to use the telescope from anyplace on the globe. Piggybacked on the main telescope is a five-inch aperture Tele Vue 127 refractor equipped with a video camera, dedicated to lunar and planetary imaging. The main telescope’s 24-inch primary mirror is ideally suited for “deep sky” imaging of objects beyond the Solar System with its SBIG STX 16803 CCD camera. With this capability, students are engaged to utilize the telescope for undergraduate lab-based classes, including our SCIN134 Introduction to Astronomy course as well as graduate level courses; for instance, our SPST632 Lunar Geology course. Going forward, the observatory has great potential for education, research, and public outreach. Examples of advanced student research projects include exoplanet photometry, variable star photometry, supernova search / study, asteroid search / study, and atmospheric observations of Mars. Our goal is to have the telescope scheduled for continuous observations of the heavens throughout the year on all clear evenings.

Presenter

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