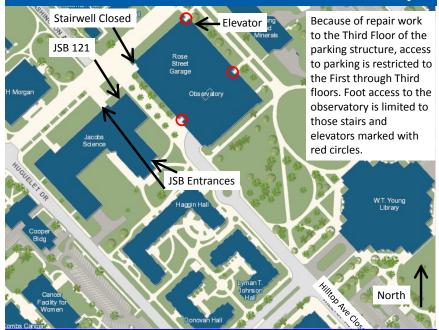


When astronomers observe objects in the universe it often conjures up an image of a person in a white lab coat spending the night looking through the eyepiece of a telescope. In our modern world of digital cameras, high precision instruments, and computer-controlled telescopes, gathering data on an astronomical object means something very different. I will discuss science observations currently being made at our own MacAdam Observatory and how we process the data to make it useful for analysis. I will conclude my talk with a discussion of exo-planet data and variable star data that are part of observing projects currently on-going at MacAdam.

Tonight's *Kentucky SkyTalk* is part of an ongoing series. These are presented by the UK Department of Physics and Astronomy, and the MacAdam Student Observatory. Held the 2<sup>nd</sup> Thursday of every month, they are always free and open to the public.

## How to find the MacAdam Student Observatory



The adjacent blocks of Woodland Ave and Hilltop Ave south of the library are closed for construction. Access to the observatory is via University Drive and northwest on Hilltop Ave.

The upper deck of the parking structure is being repaired. The stairwells marked with red circles are certain to allow access to the roof. An update will be provided at the SkyTalk.

## Next month:

September 12, 2019 - 8:00 PM

TBA

## The August Sky

Every year on or about August 12<sup>th</sup> the Earth passes near the center dust trail of comet Swift-Tuttle, the most dangerous known object in the solar system. This year the meteor shower will be less spectacular because the light of a full Moon will overpower all but the largest bits of comet dust. Instead, have a look at your home, the Milky Way Galaxy; no telescope required. Binoculars would be great, but the naked eye view is spectacular if you can find a dark observing site. We are embedded in the Galactic disk, and therefore see the over-abundance of stars as a ring of light that encircles us. The northern summer Milky Way is particularly vivid. And the most striking features are the regions with almost no stars. The central plane of most spiral galaxies is filled with gas and opaque dust. The Great Cygnus Rift stretches from high in the summer sky to the direction of the center of the Galaxy and beyond, below our horizon in Kentucky. See a MacAdam Student Observatory map and images here.

Come and see the night sky through many different telescopes at the <u>Blue Grass Amateur Astronomy</u> <u>Club</u>'s outings at Raven Run. The remaining (Saturday) dates in 2019 are:

Aug 31, Sep 28, Oct 26

Call <u>Raven Run</u> an hour before sunset to verify that the weather will be sufficiently clear. You will find an <u>all-sky finder chart</u> for this month at <u>our web site</u>.



UK's MacAdam Student Observatory, designed and built in 2007, was officially opened in 2008. The Observatory is located atop Parking Structure #2 between the W.T. Young Library and the Chemistry-Physics Building, and its dome houses a high-quality 20-inch reflecting telescope plus a variety of state-of-the-art optical instruments. The Observatory is dedicated to serving UK students as well as astronomy enthusiasts of every age and experience level throughout Kentucky.

Are you interested in informal talks on astronomy and astrophysics? Are you curious about telescope design and operation? Would you care to take a look through the eyepiece?

The Department of Physics & Astronomy in UK's College of Arts & Sciences welcomes you! Join us to experience the excitement of stargazing through a powerful telescope. An up-to-date calendar of events can be found on our website:

## https://pa.as.uky.edu/observatory

