The April Sky

For Your Eyes Only:

Like Jewels on a String, as Jupiter sets in the west, Saturn rises in the east with two more planets in between. Also appearing along the plane of the solar system, are Venus and Mars. Late April is the best time this month to visualize the ecliptic. Although the sky lacks the ecliptic grid our all sky chart has, you can visualize the ecliptic plane by watching the Moon during the last week in April.

As the Sun sets on April 22nd, the Moon and Jupiter are just above the western horizon. (You will have to have exceptionally clear skies and no obstructions in the west to see this.) Two days later on the 24th, the Moon has moved eastward and is a beautiful crescent six degrees from Venus. (If you have a small telescope, you will see that Venus also shares a crescent phase, and for the same reason.) On the 30th, the Moon passes Mars. Viewed now from a different perspective, its phase is gibbous. Nearly at full phase, the Moon passes Saturn on the night of May 3rd. Along the ecliptic plane lie the orbits of all the major planets and most of their moons. They move in the plane of the solar system and in the same direction, evidence that the solar system formed from the same material at the same time.

For Your Binoculars:

Messier 44 (M44) was first observed through a telescope by Galileo. (A cheap pair of binoculars will give you a better view than Galileo's telescope.) Almost 600 light-years away, a sun-like star is too faint to be seen in binoculars. All the stars you will see in this cluster are much brighter than the Sun, either by virtue of their higher temperatures or larger diameters. Being near the ecliptic, the planets are frequent visitors to the Beehive.

You can find an all-sky finder chart for this month at our web site:

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

UK MacAdam

STUDENT OBSERVATORY

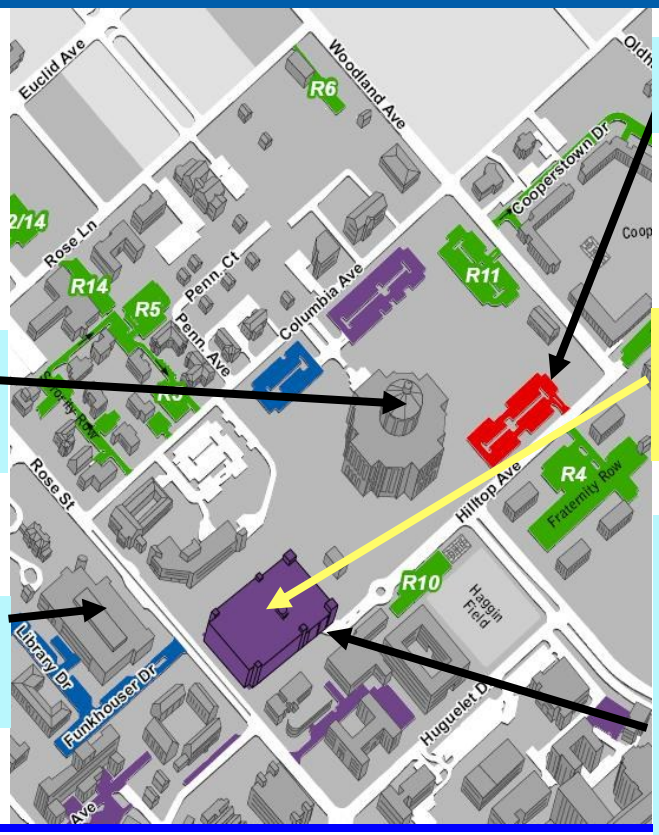
UK's MacAdam Student Observatory, designed and built in 2007, was officially opened in 2008. The Observatory is located atop Parking Structure #2 between the W.T. Young Library and the Chemistry-Physics Building, and its dome houses a high-quality 20-inch reflecting telescope plus a variety of state-of-the-art 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

How to find the MacAdam Student Observatory



Alternative Parking

W.T. Young Library

MacAdam Student Observatory

Chemistry/ Physics Building

SkyTalk Event Parking

Parking Structure #2 is accessible by car from Hilltop Ave-

Monthly Meetings

The MSO hosts monthly public-observing sessions, each with a kick-off 40 minute presentation in the Chemistry-Physics Building. The presentations will take place even on cloudy nights. If the sky is clear, the observatory will open after the talk! Can't make the SkyTalk? Then come after!

Next month:

Kyle McCarthy—University of Kentucky

May 10, 2012 - 8 PM - Chem-Phys Rm 155

Finding Alien Planets Around Nearby Stars!

Kentucky SkyTalk

Dr. Robert O'Dell—Vanderbilt University Department of Physics and Astronomy

Thursday - April 12, 2012 8PM

Chemistry-Physics Building Room 155

Building the Hubble Space Telescope

When the Hubble Space Telescope was launched in 1990 it was the product of 19 years of effort by American and European scientists and the space agencies of the USA (NASA) and Europe. Its great success today makes it seem like it must have been easy to build, but it wasn't. I will talk about how this observatory was conceived, sold to the scientific community and the congress, designed, and constructed. It was a lot of work, but worth it.

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 every 2nd Thursday of the month, they are always free and open to the public.