# The March Sky

Comets are chunks of mostly ice that are of low tensile strength due to dust in the mix. If they get close to the Sun, say within the orbit of Jupiter, the ice begins to sublimate and form beautiful tails of gas and dust. The closer the comet gets to the Sun, the greater potential for a bright, naked-eye comet. This spring a piece of a comet seen in 1844 is approaching the Sun. Will it get bright enough to be seen without a telescope? Possibly. The downside is at that time, it will appear close to the Sun, and you'll be observing near the horizon just after sunset. The beginning of June is likely the time of highest luminosity, though outbursts are possible at any time. You can find an All-Sky Chart with Comet 2019 Y4 here.

However, the same tidal forces that slosh water about on the Earth can pull comets apart. Using criteria from John Bortle this comet is probably too small and will get too close to the Sun to survive perihelion.

The Bluegrass Amateur Astronomy Club and Raven Run Nature Sanctuary present free star parties through the year. If clear, the Saturday dates for 2020 are: March 21, April 18, May 23, June 20, July 18, August 15, September 19, and October 17. See their website for details and call Raven Run to confirm before leaving home..

You will find an all-sky finder chart at our web site.

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?

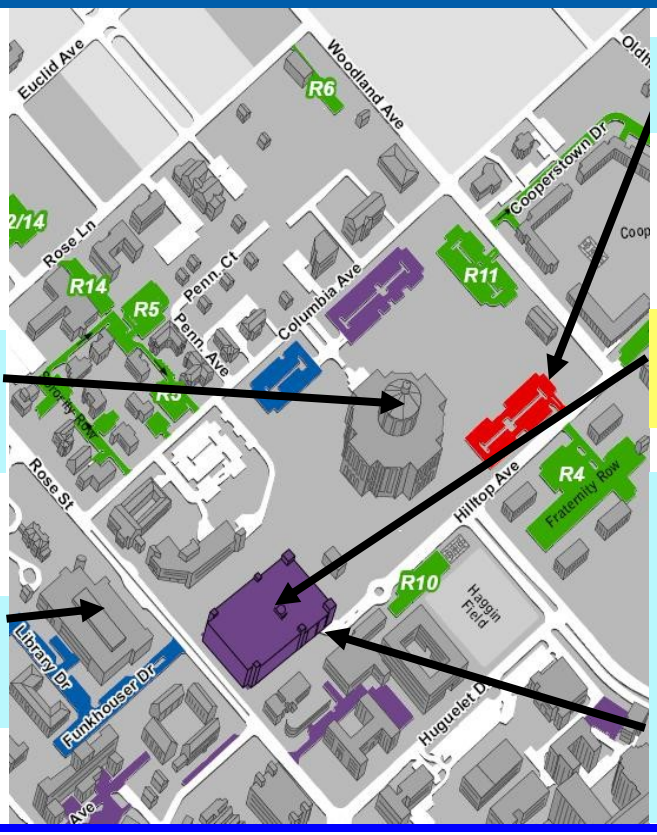
The Department of Physics & Astronomy in UK's College of Arts & Sciences welcomes you! Join us to experience the excitement of stargazing through a powerful telescope. An up-to-date calendar of events can be found on our website:

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

Our Speaker: Da Bi

Da uses computer models to simulate the interaction of Dark Matter with the visible matter in galaxies. His work provides insight into the nature of Dark Matter and how galaxies get their shapes.

## How to find the MacAdam Student Observatory




Alternative Parking

W.T. Young Library

MacAdam Student Observatory

SkyTalk Event Parking

Parking Structure #2 is accessible by car from Hilltop Avenue only.

Chemistry/ Physics Building

## 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:

Dr. Robert Williams—STSci

April 9, 2020 - **8:00 PM** - Chem-Phys Room 155

***The Hubble Deep Field***

# Kentucky SkyTalk


**Da Bi— University of Kentucky**

**Thursday - March 12, 2020 8:00 PM**

**Chemistry-Physics Building Room 155**

***Dark Matter: the Hidden Giant in the Universe***

There have been many important discoveries in astronomy during the past decades. One of them is Dark matter. As an open question that we still do not know the answer, dark matter is always a hot topic of astrophysical research. In this talk, we will talk about the story of Dark Matter: Why we need dark matter, what is Dark Matter and how Dark Matter effects the evolution of our universe.

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.