

### What's UP This Month?

Spring at last! The nights are shortening and a becoming bit hazier, but it's finally warm enough to enjoy a few hours of star gazing without worrying about frost-bite. Happy "Global Astronomy Month" - see [astronomerswithoutborders.org](http://astronomerswithoutborders.org)! Let's get started....

The month opens with a **full moon** (only 1 day before Easter, which always occurs on the first Sunday after the first full moon of spring). **Mars** is becoming larger, showing some surface features this month, as it heads towards opposition in July this year. Get up early (4-5 AM) this month to see a spectacular planet parade: on April 1-4, Mars, Saturn, and globular cluster M22 will all be within 2 degrees of each other. Then, on April 7<sup>th</sup> you can see a beautiful conjunction of Mars, Saturn, and the waning crescent moon in the southeast.

**Jupiter** is in Libra this year and can be seen low in the South after midnight. **Venus** is ascending in the western sky at sunset throughout April. Mercury is no longer visible this month as it is now between us and the sun. The **Lyrids Meteor Shower** will occur between April 16-25<sup>th</sup>, peaking on April 22. *The Lyrids appear when the Earth passes through the debris left by Comet C/1861 G1 (Thatcher), a long-period comet with a roughly 415-year orbit.*

**Cancer** and **Melotte 111** in *Coma Berenices*. M44 is one of the closest open clusters to Earth. Just below M44 (and not visible without a scope) is **M67** (The "King Cobra Cluster"), one of the oldest open clusters. M67 is 4.5 billion years old or nearly the same age as our own sun. M67 has a curious mix of stars that are of great interest to astronomers.

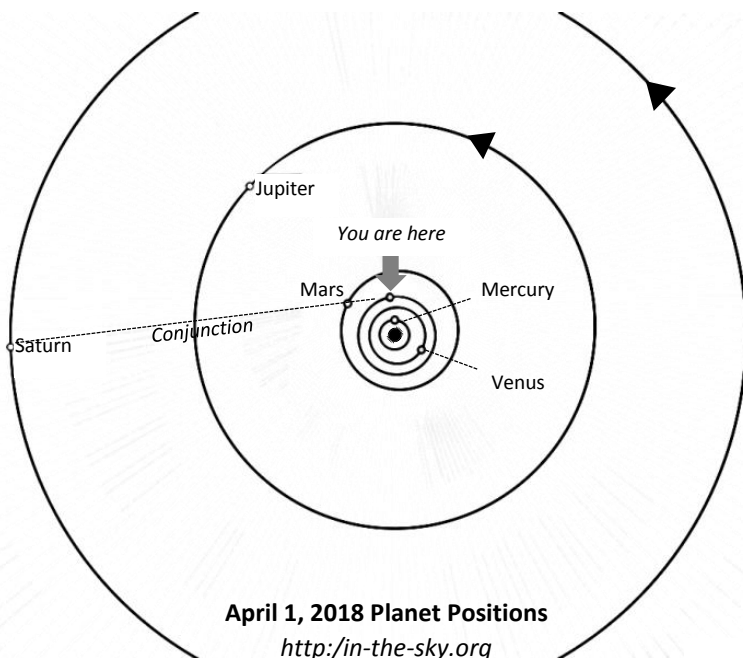
Adventuring farther from home, look for **M53** in *Coma Berenices* and **M3** in *Canes Venatici*... because globular clusters are by far the best deep sky objects... ever... because I said so.... ☺

April is also the month when Earth's "dark side" is turning away from the plane of the galaxy and facing into deep space. So let's leave the Milky Way (with our telescopes) to enter the realm of the galaxies! **The Leo and Virgo Galaxy Clusters** can be found in the "Spring Triangle," formed by Spica (*Virgo*), Arcturus (*Bootes*), and Regulus (*Leo*). Leo is high overhead this month and home to the "Leo Trio" (**M65**, **M66**, and **NGC 3627**). Searching the summer triangle, how many galaxies can you find?

This is also an excellent month to view **M81** (an edge-on "star burst" galaxy) and **M82** (a "grand design" spiral galaxy), both located within 2 degrees of each other in Ursa Major.

Safe travels,

*Jim*



Leaving the solar system and entering the local arm of our galaxy, we come to two prominent open clusters visible without a telescope: **M44** (The "Beehive Cluster") in

### CAAA UP-dates

The South Carolina State Museum in Columbia, SC now has a program which interacts with local amateur astronomy groups and schools to promote astronomy outreach across the state. The museum representative spoke during the April meeting about how this will help our outreach efforts and inter-organization cooperation. *Stay tuned... more to come...!*

RAM updated us on our past outreach programs. RAM and Stan will be representing us at the upcoming Southern Star Conference in April.

Check out our updated website: <http://caastro.com> which now features a photo gallery. (Thanks Stan!) We will post the monthly newsletter on the site as well.

Please let me know if you have anything you would like to add to future newsletters: [nightrabbitastro@gmail.com](mailto:nightrabbitastro@gmail.com).

**Next Meeting: May 7 @ 7:00 pm - 9:00 pm at the Central-Clemson Library**

# Monthly Observation Challenges

April 2018

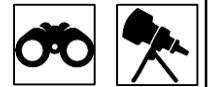
By *nightrabbitastro@gmail.com*

## Unaided Eye



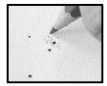
- Venus "rising" through the month
- Mars-Saturn-Moon Conjunction
- M44
- Melotte 111
- Ursa Major (*Challenge: not just the "Big Dipper" – identify ALL the stars.*)
- Cancer → head of Hydra → Hydra → Corvus
- Leo: Light pollution project - [globeatnight.org](http://globeatnight.org)

## Binoculars / Small Telescopes



- Mars-Saturn-M22 Conjunction
- M44 and M67
- M53 (*Challenge: can you find another GC in the same field?!*)
- M3
- M81 and M82
- The Messier Galaxies in Leo and Virgo
- Next meeting May 7...bring your "homework!" ☺

## Notes and Sketches




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