#### **ASTROPHILE INDIA**



# **The Astrophile Newsletter**

**One Fond of Starlore: An Amateur Astronomer** Insta: @astrophile\_edu; Facebook: @astrophileeducation Twitter: @astrophileedu



## Astronomers photograph the Black Hole

# Astronomy research team used large telescopes across the globe to take the first ever image of Black Hole in M87

Every year the month of April is celebrated as "Global Astronomy Month" or GAM. The celebration marks many achievements in the field of astronomy and space exploration and educating the general public about the importance of astronomy in our life. The educational institutes and outreach organisations around the world will conduct many events based on the global themes.

The feet was achieved by over 200 astronomers and researchers using 8 ground based facilities and Event horizon telescope with data compilation for over a decade.

To read more about this in detail, kindly visit: <u>http://astro-phile.com/2019/05/07/</u> <u>black-hole-shot-and-shared/</u>

## Moon phases and dates

#### Important phases and dates for Moon to plan your observation

05/05/19	New Moon	04:15
12/05/19	First Quarter	06:42
19/05/19	Full Moon	02:41
26/05/19	Third Quarter	22:03



Mars The red planet will be setting an

hour after the sunset this month shining faint in the evening twilight. Also at over 4 million KM from Earth, the features will be missing as seen from the telescope.



**Venus** Venus will be rising an hour before the sunrise

and hence the bright planet will not be at its best due to morning twilight. It will be showing crescent phase.





Jupiter Rising late evening, Jupiter will b e

d is p l a y in g the characteristics it is loved for. The gaseous giant is very close to the milky way arm of scorpio and hence the constellation and the arm can be spotted easily from rural skies..



**Saturn** Saturn will be rising just

a r o u n d midnight and post midnight, the planet will be in a very good position to display the rings it is known for. Saturn will be visible for rest of the night setting long after sunrise.

## 40 students, 160 images, Earth seen as never before



NASA conducted the EarthKAM spring missing also knowns as Mission 66 from April 09-12, 2019. Astrophile conducted the workshop with 40 students who in total clicked 160 spectacular images of our home planet using a camera onboard International Space Station. The images will be used to learn and understand different features on Earth. These images will also be helpful in studying many varying features like deforestation and urbanisation.

The EarthKAM mission is a NASA educational outreach program that enables students and teachers, to learn about Earth from the unique perspective of space. The program is conducted in over 60 countries with more than 5,000 schools and 60,000 students participating annually.

# Stargazing from the picturesque Kodaikanal



Astrophile Education Services conducted a 2 night skywatch for CMR group of school students near Kodaikanal late last month. The students were from different schools in Bengaluru under the CRM group of institutions. The program was organised by Amazing Holidays, Bengaluru.

The students learnt about the sky, constellations, starhopping, and star trails Photography with DSLR camera. The students observed objects like Little Beehive Cluster, Orion Nebula, Pleiades, and other celestial Gems in the sky. The students also observed Mars through the telescope. The program was concluded by The beautiful Moon Rise from behind the mountain. The efforts were highly appreciated by the students and teachers.

#### TRANSIT OF MERCURY SCIENTIFIC EXPEDITION ANNOUNCEMENT

Astrophile Education Services is happy and excited to announce a scientific expedition to the USA for observing and studying the Transit of Mercury. The rare celestial alignment will take place on Nov. 11, 2019 and will be visible from entire East coast. The location of observation will be Orlando. The program will enable students to carry out scientific

study of the Transit of Mercury and the experiments are being designed in order to study various aspects of the alignment. Transit of Mercury, is more common and frequent as compared

to that of Venus. The last transit was observed on May 09, 2016 and the next one after this will be visible only on Nov. 13, 2032. This makes the transit of mercury a very special one and not to be missed.

The transit can be observed for interior planets like Mercury and Venus. The next Transit of Venus will be on Dec 16, 2117 and anyone alive the last time (June 6, 2012) the transit happen will most likely will not be alive to see it again. Transits can be very useful in understanding certain characteristics of the planet in question. The atmosphere of Venus was detected during one of the transit and similarly non existence of atmosphere was also detected during one of the transits of Mercury.



A scientific expedition is being organised by joint efforts of Astrophile India and Atlantis Erudition in India. Astrophile experts will lead the scientific expedition while Atlantis team will provide the ground support. I hope to see your students as part of the same. You can write to us for more details. Announcements will be made via email soon.