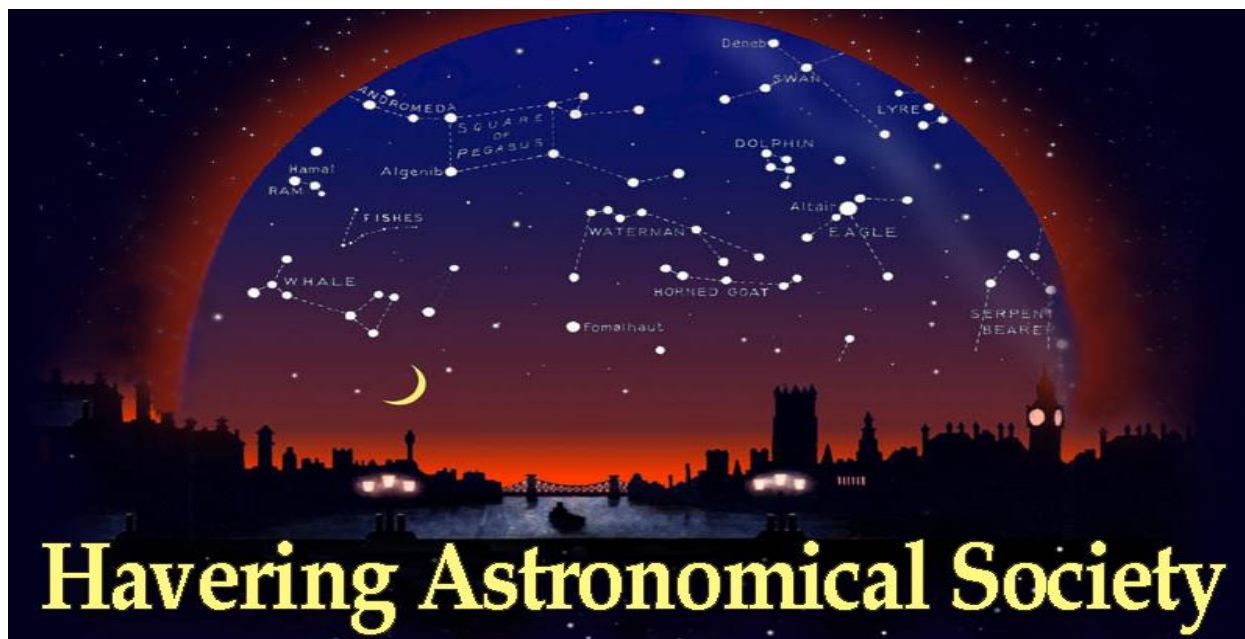


**WELCOME TO OUR MEMBERS AND GUESTS.  
PLEASE SIGN IN AND WE HOPE YOU ENJOY THE EVENING**

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#### This Month

We look forward to some contributions from some of our own members.

#### Last Month

We celebrated our 22<sup>nd</sup> Anniversary with yet another wonderful cake creation by **Liz** and some nibbles. Unfortunately, **Konrad** was unable to join us for due to ill health but hopefully he will be with us in July. So although we won't have the lovely cake from **Liz** then, we can still have a few nibbles.

#### Member's News

We were so pleased to see **Sid** at our last meeting and we thank **Liz**'s husband, **Pete**, who collected him from Barking so he could to attend.

#### The Southend Planetarium

The Southend Planetarium is the only public Planetarium in the south-east, outside of London. It offers visitors a unique experience with changing talks throughout the year, exploring the night sky. All presentations are given live with opportunities to question the knowledgeable lecturers. Each show can seat around 20 people. Pre-booked groups are welcomed from Tuesdays to Saturdays. For further details on their programme you can view online at [www.southendmuseums.co.uk/page/Planetarium](http://www.southendmuseums.co.uk/page/Planetarium)

#### Starfest 2017

Starfest 2017 takes place on Saturday 15<sup>th</sup> July at Chelmer Valley High School, Chelmsford. Events will include 6 guest astronomy speakers, a planetarium dome, displays, trade and art work stands, an astrophotography workshop, scale spacecraft models and lots more. Tickets, which are £10 for adults and £5 for under 16's, are bookable online at [neas.me.uk](http://neas.me.uk)

### **Next Meeting ~ June 21st**

At our next meeting we will be joined by **Jerry Workman** who will give us a presentation about "The Outer Planets".

# NIGHT SKY

**Venus:** can best be seen on May 31<sup>st</sup> at 04:00 BST in **Pisces** low in the East. This will be a great time to view the planet as it will be showing a phase of 47%. A 3 inch or larger telescope is recommended and some time and patience needed to make out the subtle variations in **Venus's** dense atmosphere.

**Mercury:** can best be seen on May 31<sup>st</sup> at 04:20 BST in **Aries** low in the East northeast. **Mercury** will be hard to spot due to its low altitude before sunrise. The planet is not particularly bright at the start of May at mag. +2.4 but improves to -0.2 by the 31<sup>st</sup>.

**Jupiter:** can best be seen on June 1<sup>st</sup> at 22:45 BST in **Virgo** in the South southwest. **Jupiter** is no longer able to **culminate** (reach its highest point in the sky) in darkness. Instead it appears west of the Meridian as darkness falls with an apparent 37 arcsecond diameter.

**Saturn:** can best be seen on June 15<sup>th</sup> at 01:00 BST in **Ophiuchus** low in the South. **Saturn** reaches opposition on this date placing it in the opposite position to the **Sun** in the sky. The distance between the **Earth** and **Saturn** is reduced making it appear slightly larger and brighter than normal. A 6 inch or larger telescope will enable you to view **Saturn's** rings which will appear brighter at this time.



*Thank you to  
everyone who  
helps with  
refreshments.*

## Observing at South Weald

Please speak to **Martin** or **Kerry** to confirm if there any planned dates. The **HAS Observing Group** had its first meeting at the Queens Theatre this month and it was a great success with the topics of astrophotography, processing and telescopes being covered. Contact **Kerry** or **Martin** if you are interested.

## Young Astronomers

**John** posed some questions on life on other planets and all the possibilities. Our next meeting will be on June 15<sup>th</sup> when we look forward to visiting **Terry** and **Christine's** home. After that we will then be having a break until October.

## Spaceflight News

### Buzz Aldrin Recommends Retiring the Space Station for Humankind's Survival

**Buzz Aldrin** wants **NASA** to retire the International Space Station (ISS) and focus instead on sending people to Mars. If NASA and its partner agencies really want to make the Red Planet a viable option for humankind's survival, Aldrin says: *"We must retire the ISS as soon as possible."* Speaking at a presentation at the 2017 Humans to Mars conference, the former astronaut clarified, *"we simply cannot afford \$3.5 billion a year of that cost"*. Aldrin said that NASA should now keep handing activities that stay in low Earth orbit (LEO) to private entities, such as **SpaceX**. The space agency has been encouraging its industry partners in that aspect, awarding them contracts to transport cargo and crew to and from the ISS. In addition, other companies should build and operate stations that are separate from the ISS. These commercial outposts could bring about cooperation with the Chinese, according to Aldrin, as China intends to launch its own space station in the next five years. These private outposts serve as the foundation for Aldrin's proposed Mars colonization process, which depends on *"cyclers,"* or spacecraft that transport people and cargo back and forth between two locations in space. He said, *"The foundation of human transportation is the cyclers. Very rugged, so it'll last 30 years or so; no external moving parts."* The next step would be to get the international spaceflight community to work together to form a base of operations, where people could learn and try out methods needed to survive on Mars, like using natural resources to create products such as propellant. *"Let's be certain that we've developed a sustainable plan to stay on Mars. No flags and footprints this time"*. The ISS is funded until 2024, and NASA officials, as well as the Russian federal space agency and other partners have raised the possibility of extending the outpost's mission until 2028.

