

## CHAIRMAN'S REPORT 2022

The Society has had another exceptionally good year, with an excellent range of speakers for which we must thank Shirish and Myself and Peter. We began in January with Professor Brad Gibson from Hull University; it was a wonderful talk about “what do we know today (that we didn't a couple of years ago)”. We have witnessed the birth of a planet, images of a Black hole and a Neutron star that is ten billion time stronger than steel. (Superman?)

In February we listened to Professor Peter Bull talking about the “A Window through the Universe”. He went through how the universe came into being, from the Big Bang to the Present day and onto the End. How we know less about the Atom than we know about the Earth and the Sun, and also about time & space as a Dimension.

In March we had our own John Murrell talk about “Hunting down Exoplanets or how long is a piece of String”. He went through how he discovered two Exoplanets that turned out to be two Eclipsing Binary stars from Gaia Data. One of them was the size of our sun, the other a small brown Dwarf. It was such a shame he passed away in July, will be sadly missed by all of us, he was an Excellent speaker.

We had back the wonderful John Axtell, it was his last ever talk for a while as he takes some time off. I was about using Binoculars for Astronomy. He showed us how to use them, how to support them and how fast it is to set them up. He also showed us what you could see with them, including M33 pinwheel and M31 Andromeda Galaxy. He talked about the War in Ukraine and how sanctions will affect the International Space station.

In May we had the pleasure of Michael Maunder, talking about “It's life Jim but not as we know it”. A fascinating talk on how life came to the Earth e.g., through Comets or Hydrothermal Vents in the Sea, and also about how the Moon is a factor in Life. How Life can be so different from us. It gave me a lot to think about.

In June we had Colin Stuart talk about “The Rebel Star Our Sun”. It was amazing that our sun can burn 620 million tonnes of hydrogen and convert it to 600 and 16 tonnes of helium in a second. The giver of life that can also take it away very quickly.

In July we had our own David Fishwick talking about “Twinkle Twinkle little Star”, it was centred around what Stars are made from, how the change of colour can tell you what they are made from their size and how far away they are from us. We will look forward to the second part of David's talk next year when he will discuss the Mass of Stars.

In Sept we had the Picnic at Headley Heath (Steve say a bit)

On the September meeting we had a change of speaker and Owen Brazell talked to us about “Observing Planetary Nebula”. It was all about Emission, Reflection and Dark Nebula.

In October we welcomed Emily Charles talking about “Dwarf Galaxies of the Local Group”. It was fascinating going into Spectroscopy and we saw visual images containing Dark Matter with Halos around them. Hopefully, she can continue next year and give us an update of her study of galaxies.

The last Speaker was Dr Steve Fossey talking about “Exoplanetary Ramblings”. He went through all the different methods of detecting Exoplanets including Gravitational Lensing, Gaia, and the Radial velocity method.

I must thank all my fellow committee members for all their work and support and who make my job such a joy to do.

David F for all his help with the use of the school facilities.

School Space for the use of the school.

An excellent job by Steve for keeping our Accounts for last year and observing sessions.

John Davey for his splendid work on Janus.

Peter for all his help in the Secretary role, for continuing to develop our website

Maurice Gavin Observatory along with Ron Johnson and Paul Evans.

Thanks, Shirish, and Peter & I for organising speakers for 2023

Ron Canham for all the sky at night sessions which were most informative and Interesting.

And let us not forget Gary Walker who help the committee with tables and chair set up.

Finally, may I wish you a merry Christmas and a wonderful new year.

Anita King EAS Chairman