



# **Derby & District** **Astronomical Society**

**Friends Meeting House, St Helens St, Derby.**

**Secretary B. Dodson**

**[secretary@derbyastronomy.org](mailto:secretary@derbyastronomy.org)**

**Friday March 21<sup>st</sup> 2025 – 7:30pm**

**Anthony Southwell**

## **Space Telescopes: Our Eyes on the Universe**

When anyone says the words 'Space Telescope,' people immediately think of such scientific successes such as the Hubble Space Telescope (HST) and the James Webb Space Telescope (JWST).

But they are not the whole story, there are other instruments that have been launched over the last 60-odd years that have covered the entire electromagnetic spectrum from gamma ray to the far infra-red, these instruments have made as much of a contribution to our understanding of the Universe as the Hubble and Webb space telescopes. These other space-based instruments have become 'our eyes on the Universe.'

In this lecture Anthony will outline the history of the idea of the space telescope, we will then take a brief look at the Electromagnetic Spectrum and how the Earth's atmosphere distorts and absorbs most of the EM spectrum, hence the need to get instruments above the atmosphere to gather these other wavelengths of light.

Anthony will give a brief overview of the instruments and spacecraft that have been launched and that operated in a particular wavelength of the EM Spectrum. Anthony will highlight a few of the more notable missions and their discoveries. Finally, Anthony will look to the space-based instruments of the future and what their missions will be.

Please note that occasionally due to circumstances beyond the control of the society there may be changes made to the programme. For the latest information please refer to the DDAS website — <http://www.derbyastronomy.org>

There is a small charge of £2 for members and £5 for non-members on the door towards the cost of room hire.

Tea, coffee and biscuits available at the end of the talk for 25p.

## Anthony Southwell



Anthony has been a member of the DDAS since February 1987, when he attended his first meeting, which featured a talk by two members of the British Interplanetary Society (BIS) concerning the BIS 'Project Daedalus,' a concept for an interstellar probe that would investigate Barnard's Star, 6 light years away, after a 50-year journey.

In his time as a member of the DDAS, Anthony has held a number of positions on the DDAS Committee: including, Chairman, Vice-Chairman, Secretary, Public Relations Officer (a Committee position that Anthony originated) and Editor of the DDAS journal 'Aries.' Anthony has presented a number of lectures to the DDAS on a range of astronomical and space-related topics, as well as to other groups and astronomy societies. For the last 11 years Anthony has been giving public lectures at the QUAD in Derby on a variety of astronomy and space topics. Anthony's interests range from planetary science, cosmology, stellar and galactic evolution, to the search for exo-planets and space exploration.

Anthony's other scientific passion is Earth Sciences, particularly Geology. This led him to attend the University of Derby where he gained a BSc (Hons) in Applied Environmental Earth Science (covering Geology, Environmental Science and Remote Sensing and Geographical Information Systems) in the year 2000. Anthony then went on to gain a Post Graduate Diploma (PG Dip) in Environmental Management in 2010.