

Where to Find Us



****Doors open 7pm for 7.30pm start****

Come along and join us - your first meeting is free.

Meetings

Meetings are held on the first Friday of each month at Lhanbryde Community Centre (Robertson Road, Lhanbryde, Moray, IV30 8QQ). The Centre is ideal for routine observing either during or after meetings, with only minimal light pollution.

January, February and March meetings will be fully online via ZOOM. This is to avoid having to cancel any meetings due to bad weather locally or affecting the Speakers being able to travel to Moray.

In the event of any other meeting having to take place over ZOOM this will be communicated to members by email and the website.

Moray Astro Meets

Occasional observing sessions which can be held anywhere in Moray as and when the "seeing" (sky conditions) is favourable (and subject to volunteers'/experts' availability) can take place from September through to March; location and opening is advised by email and through Facebook. At other times there may be the occasional Solar observing.

SIGMA also conducts 'Outreach' to bring astronomy to schools, and groups, though this too depends on volunteers' availability. Details on how to contact SIGMA can be found on our website.

Membership

Your first meeting is free. Membership is open to everyone. Child membership is free, but a parent or guardian must accompany them if they're under 16 years of age.

Rates

£24.....Ordinary

£12.....Student (*over 18 in full time education*)

£18.....Concessionary (*over 60s may apply for this - please contact the Membership Secretary for information*)

Membership is renewed in full (*unless there are extenuating circumstances*) in January. New members joining during the year will pay a pro-rata fee. The first meeting is always free.

Affiliated Clubs/Societies

SIGMA membership gives you affiliated membership of both *Highlands Astronomical Society* and *North Ronaldsay Astronomy Group*. You are welcome to attend their monthly meetings and events. Members of these clubs/societies are also welcome to attend SIGMA meetings and events. (*Note this does not confer voting rights.*)



Club Meetings and Information 2023

Presidents

Bill Leslie

Tim Schroder

Committee

Pete Sherman (Chairman)

Richard Oakley (Secretary)

Stuart Brooks (Treasurer)

Chris Stradling MBE (Events)

Mick O'Donnell (Membership)

Kevin Stocks (Health & Safety)

Helen Williamson (Webmaster)

Ray Palmer

Contact emails for the above are on the website

www.sigma-astro.co.uk

Friday, 6 January 2023 - ZOOM

Against The Odds: A Patagonian Eclipse

Mike Frost, Coventry and Warwickshire Astronomy Society

On December 14th 2020, the path of a total eclipse crossed the northern part of Patagonia (Chile and Argentina) - BUT the coronavirus pandemic shut down travel. Argentina and Chile closed their borders. However... a narrow window of opportunity began to inch open. Astro-Trails and Eurotur were able to negotiate permits for small groups of eclipse chasers to enter Argentina. Mike was one of their guest astronomers and saw a stunning eclipse from an estancia (horse ranch) in Neuquen Province, northern Patagonia.

Friday, 3 February 2023 - ZOOM

Einstein's Universe: The Dawn, and Exciting Future, of Gravitational-Wave Astronomy

Prof. Martin Hendry, University of Glasgow

Gravitational waves are ripples in space-time produced by the most violent events in the cosmos: exploding stars, colliding black holes, even the Big Bang itself. Einstein predicted them in 1915 by Albert Einstein. 100 years later they were detected by the most sensitive scientific instruments ever built – a discovery awarded the 2017 Nobel Prize for Physics. And yet in just over seven years detecting them has gone from an epoch-making breakthrough to an almost routine occurrence, with almost 100 events observed to date, and has opened an entirely new way for astronomers to study the universe. Join Martin as he explores the exciting dawn – and bright future – of gravitational-wave astronomy, and the remarkable new picture of Einstein's universe which it is revealing to us.

Friday, 3 March 2023 - ZOOM

What Makes a Planet Habitable

*Patrick Barth, University of St Andrews
and the Institute for Space Research in Graz, Austria*

In the last 25 years we have found thousands of planets around other stars, but so far we were not able to detect life on any other body than Earth. After a short introduction into the diversity of extrasolar planets, Patrick will try to shed some light on the fascinating research on the origin of life and to answer some questions regarding the possibility of life on extrasolar planets: What does life need to start? Which environments might be harmful to life? What exotic conditions on a planet can we imagine that can still give rise to and host life? And maybe most importantly: How can we detect life on another planet?

Friday, 7 April 2023

The Sloan Digital Sky Survey

Anne-Marie Weijmans, University of St Andrews

The Sloan Digital Sky Survey (SDSS) has been surveying the sky for over 20 years now. The survey started originally with a camera to image the sky with its telescope in New Mexico (United States), and then added spectrographs to measure the light distributions from stars, galaxies and quasars. In recent years, the survey expanded to the Southern hemisphere, and even more recently, it started to add time-domain observations to its surveys, to monitor variable objects. This talk will discuss the history and technological developments of the SDSS, highlights of scientific discoveries, and what we can expect from SDSS in the next few years. SDSS was one of the first surveys to make its data freely publicly available, Anne-Marie will also showcase its data archive, and demonstrate how anyone who wants to take a look at a digital part of the sky can do so! More information: <https://www.sdss.org/>

Friday, 5 May 2023

Apollo 13: Beyond the Headlines

Prof. Nigel Bannister, Space Park, Leicester

Apollo 13, launched in 1970, 9 months after the first men on the moon, but lunar travel was becoming back-page news. The programme was catapulted back into the full glare of publicity, reminding us of the risks of space travel. Based on his work as a consultant for a TV documentary, this talk draws on accounts from NASA Apollo engineers, the mission report and transmissions from the NASA archives, to tell a story partly familiar to fans of the movie, but which also considers some of the lesser known aspects of the mission, contributing failures in the years before the launch, and the coincidences, deliberate decisions and planning which led ultimately to the safe return of the crew.

Friday, 2 June 2023

AGM & Solar Outdoor Astronomical Kitchen Event (SOAKE)

SIGMA Members

Friday, 7 July 2023

Equipment Night

SIGMA Members

A chance for you to see the different types of telescopes and binoculars within the membership up close.

Friday, 4 August 2023

Space Exploration via the Medium of Plastic Model Kits

*John Davies, UK Astronomy Technology Centre,
Royal Observatory Edinburgh.*

As NASA gets close to returning humans to the Moon with its Artemis programme John will attempt to tell some little known aspects of the original Moon race of the 1960s using examples of well loved plastic model kits as a focus. Revisit the history of space exploration, and perhaps your own childhood, via Airfix, Revell, Monogram, Aurora and other manufacturers. No assembly required.

Friday, 1 September 2023

From the Sun to the Outposts of the Universe: The Life of George Ellery Hale

Brian Kelly, Discovery Dundee

The American astronomer George Ellery Hale (1868-1938) was a pioneering solar astronomer and the driving force behind the establishment of several major US observatories and the building of some of the world's largest telescopes. This talk will look at his life and scientific work along with his remarkable influence on the development of twentieth-century astronomy.

Friday, 6 October 2023

(Making Sense of the) Colours in the Night Sky

Gordon Mackie, Caithness Astronomy Group

Gordon will look at the colours of objects and phenomenon in the night sky, the causes of the colours and what it tells us about what we're looking at.

Friday, 3 November 2023

TBC

Alexandra Amon

Details to follow.

Friday, 1 December 2023

Christmas Quiz

SIGMA Members and your Families

Bring along the family for a night of fun, questions and mince pies to end the year. There will also be the usual Christmas raffle.