



**Unless otherwise stated,
all monthly meetings are held at: -**

Birnie Village Hall, Thomshill,
Near Elgin, Moray, IV30 8GY.

Friday 9th January 2015
"SIGMA Stargazing Night"
Lhanbryde Community Centre

SIGMA's own stargazing night event, which will be a joint club night and public observing session. Held at Lhanbryde Community Centre, the event will give members and visitors a chance to meet and talk to astronomers, and see different telescopes and, weather permitting, many of the wonders of Moray's night sky.

Friday 6th February 2015
"James Clerk Maxwell"
Howie Firth MBE- Director Orkney Science Festival

Howie Firth will be discussing the life and work of Scottish mathematical physicist, James Clerk Maxwell who formulated the classical theory of electromagnetic radiation, bringing together electricity, magnetism, and light as manifestations of the same phenomenon.

Friday 6th March 2015
"Going Over Galaxies with a Fine Tooth Comb"
Megan Argo - University of Manchester

Radio astronomy has been transformed over the last fifty years from large single dishes to arrays of telescopes working together to create images with amazing resolution. Megan will illustrate these fascinating new techniques and show how we are using them to study galaxies at spectacularly high resolution.

Friday 3rd April 2015
"Building the International Space Station"
Chris Stradling - SIGMA

Long-standing SIGMA member Chris Stradling will be looking at the history of manned space stations and the international collaboration behind one of the most complex engineering projects in history.

Friday 1st May 2015
"Moons of the Solar System"
Lyn Smith -BAA/ Clydesdale Astronomical Society

Lyn will be giving us a comprehensive trip through the moons of the solar system. This talk was inspired by the magnificent images sent back from the Cassini-Huygens mission and promises to show off incredible images we have of these far-off worlds on our doorstep.

Friday 5th June 2015
"SOAKE"
Birnie Village Hall

SIGMA will be holding its annual Solar Outdoor Astronomical Kitchen Event in Birnie again. A range of solar telescopes will be available with which to observe our nearest star, alongside a delicious BBQ. An indoor programme is planned in the event of poor weather.

Friday 3rd July 2015 - Annual General Meeting
Membership of SIGMA

Our annual review of SIGMA events along with astronomical social opportunities. The committee is also elected and any member can stand for election, iaw the Constitution, which may be found on the website.

Friday 7th August 2015
"Johannes Kepler - Harmony of the Spheres"
Paul Kieniewicz - Strathdeveron Dark Sky Society

Paul will be talking about the life and work of Johannes Kepler, best known for his discovery that planets move in elliptical orbits, and the relationship between their orbital speed and distance from the sun.

Friday 4th September 2015
"Lucky 13 - The Story of Apollo 13"
David Paterson - Dundee Astronomical Society

David will be covering the story of the 1970 Apollo 13 mission, how the accident happened, and how a series of "lucky breaks" and incredible teamwork got the astronauts home safely.

Friday 2nd October 2015
"James Webb Space Telescope"
Gillian Wright - UK Science & Technology Facilities Council

The James Webb Space Telescope is NASA's next great orbiting observatory and the successor to the Hubble Space Telescope. Gillian will be talking about its conception, development and the issues NASA has had prior to its proposed launch in Oct 2018.

Friday 6th November 2015
"Sounding Out The Sun And Stars"
Lyndsay Fletcher - University of Glasgow

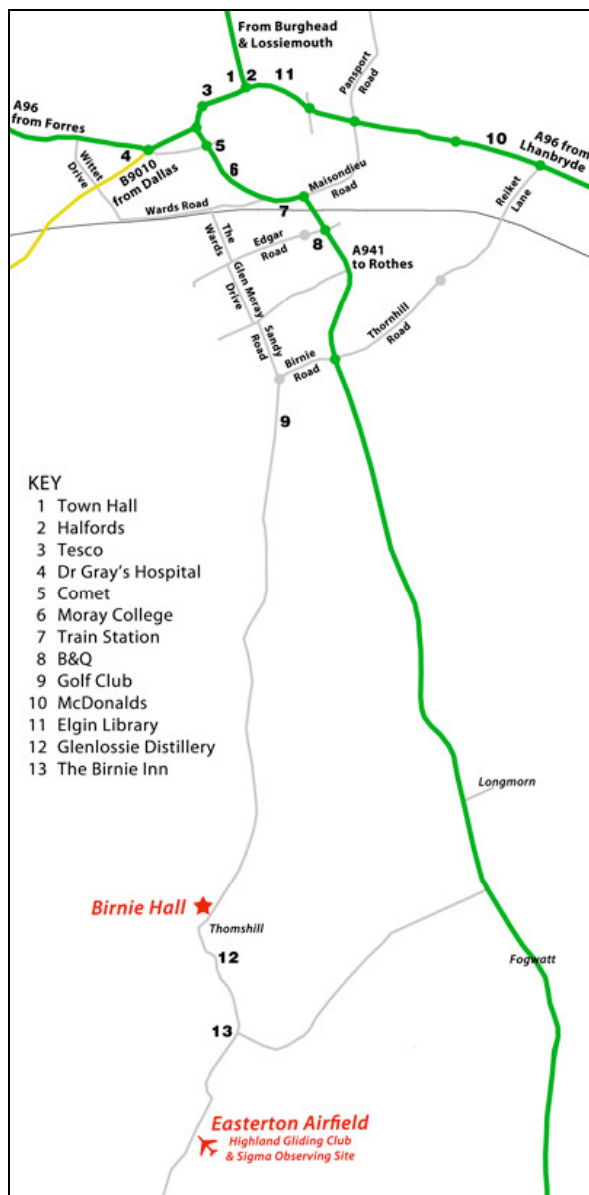
Lyndsay will be talking about how the Sun and distant stars are constantly 'ringing' with pressure waves propagating through their interiors. By detecting these waves we can study processes happening deep under their surface, in a similar way to how we use seismic waves to probe the interior structure of the Earth.

Friday 4th December 2015
"Christmas Quiz"
SIGMA Members and your Families

Another chance to bring the family along for a night of fun, questions and mince pies to end the year. There will also be the usual Xmas raffle and an update on future planned events for SIGMA in 2016.

Normally, the second half of monthly meetings includes an in-depth look into Moray's night sky for the coming month, as well as some space news.

Where to Find Us



****Doors open 7pm for 7.30pm start****
Come along and join us.
Your first meeting is free.

Membership is open to everyone and children's membership is free, but a parent or guardian must accompany them if they're under 16 years of age. You can 'try before you buy' as the first meeting is free. So do come along and join us.

SIGMA holds its meetings on the first Friday of every month (with the exception of January) at Birnie Village Hall, Thomshill, just south of Elgin as depicted on the map.

From the hall it's a short hop to our dark site at Easterton Airfield, which allows us to hold observing sessions immediately after meetings when conditions are suitable. We also have a number of Club telescopes available for members' use.

Observing sessions are also held at our dark site on Friday and Saturday evenings, conditions permitting. Site opening is advised by email (or Facebook for public sessions) but those without this service can be advised by telephone on request. The site is well worth visiting as many deep sky objects can be seen, that would otherwise be obscured by light pollution.

Additionally, SIGMA has an active 'Outreach' programme to bring astronomy to schools, groups, clubs and societies.

Full details on how to 'Rent an Astronomer' can be found on our website.



Club Meetings and Information Leaflet 2015

www.sigma-astro.co.uk

Presidents

Bill Leslie and Tim Schroder

Committee

Stan Barber - Chairman
Sam Hampton-Smith - Secretary
Stuart Brooks - Treasurer
Chris Stradling- Events
Stewart Argo - Webmaster
George Miller - Membership

**Contact emails for the above are on
the website**