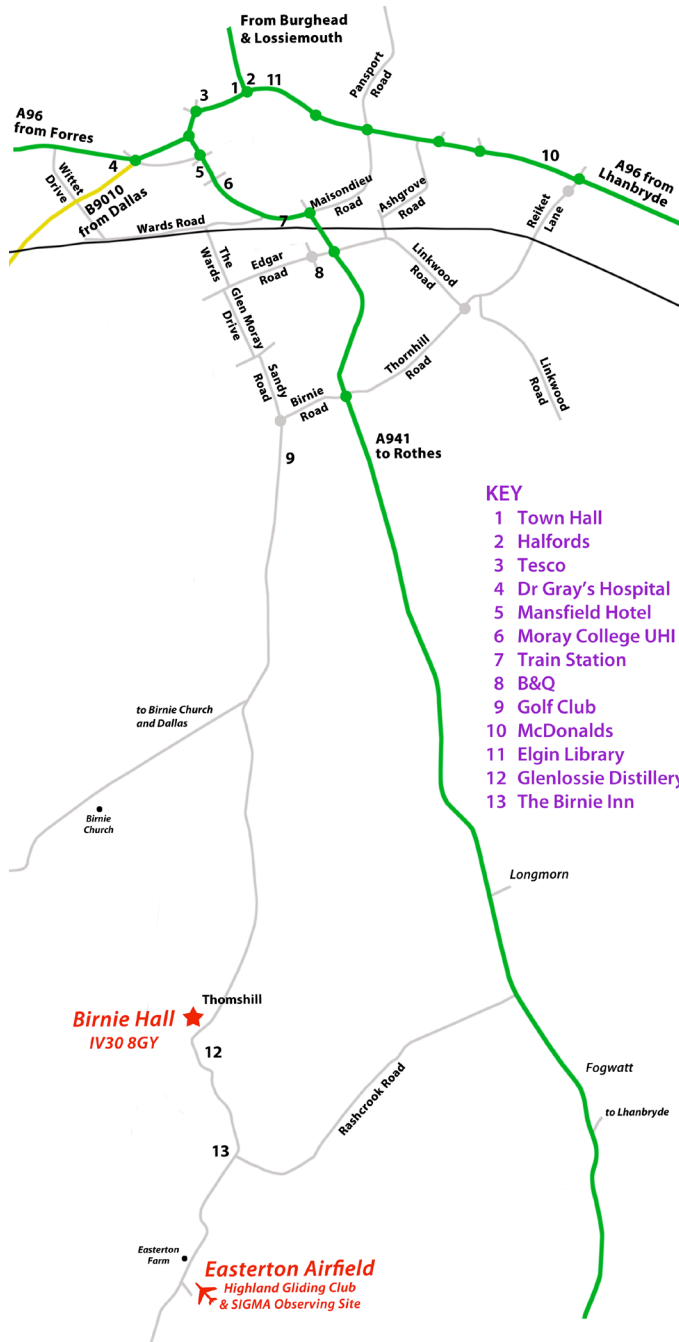


Where to Find Us



****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.

Observing sessions are also held at our dark site on Friday and Saturday evenings (*conditions permitting*). Site opening is advised by email 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, or by contacting the SIGMA Chairman, Stan Barber.

Membership 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.

SIGMA and Highlands Astronomical Society members may attend each other's monthly meetings and events. (*Note this does not confer voting rights.*)

All information correct at time of publication. E&OE.



Club Meetings and Information 2018

Presidents

Bill Leslie
Tim Schroder

Committee

Stan Barber (Chairman)
Neil Kemp (Secretary)
Stuart Brooks (Treasurer)
Pete Sherman (Events)
Mick O'Donnell (Membership)
Donna Williamson

Contact emails for the above are on the website

www.sigma-astro.co.uk



Friday 12th January 2018

SIGMA Stargazing and Equipment Night
Venue: Lhanbryde Community Centre

SIGMA's annual Stargazing meeting - a joint club night and public observing session.

Held at Lhanbryde, this event will give members and visitors a chance to see many of the wonders of the local night sky (*weather permitting*), talk with local amateur astronomers and see SIGMA members' astronomical equipment.

Friday 2nd February 2018

Variable Stars

Maarten de Vries, SIGMA

Most stars, even our own Sun, do not always shine with the same brightness all the time. Some indeed appear to change in brightness quite dramatically over short periods of time. So what causes this? In this talk Maarten will explain the various mechanisms that cause stars to vary in brightness and how observations of some of these stars have helped shape our understanding of the entire universe.

Friday 2nd March 2018

Galactic Archaeology

Dr. Oscar Gonzales, Royal Observatory, Edinburgh

How do galaxies form and evolve? Chilean astronomer Oscar Gonzales will show how understanding the formation history of our own galaxy, the Milky Way, is a critical piece of this puzzle. This talk will introduce you to the exciting world of Galactic Archaeology, what clues the astronomers look for, and how they are used to reconstruct the Milky Way's past.

Friday 6th April 2018

The Quest for Dark Matter

Dr. Anne-Marie Weijmans, St Andrews University

Anne-Marie will be discussing how astronomers detect dark matter in the universe. What we think it's doing there, what we know about it so far and, more importantly, what we don't know.

Friday 4th May 2018

Strange Clouds in the Northern Sky
Ken Kennedy - Mill's Observatory, Dundee

One of SIGMA's longstanding friends and speaker returns this month to share with us his knowledge of the strange phenomenon of Noctilucent clouds.

Friday 1st June 2018

**Annual General Meeting/Solar Observing/
Equipment Night/Social**
Venue: TBA

Another chance to catch up with events within SIGMA over the last year and to elect the new committee.

Friday 6th July 2018

Confessions of an Astronomer

Prof. Ian Robson, Royal Observatory, Edinburgh

This is a light-hearted and personal look at the life of a professional astronomer. In addition to the research and teaching, perhaps surprisingly, it can be packed with 'interest' in the widest sense of the word. The talk contains many amusing and exciting anecdotes; from being marooned with a steaming helium dewar in a cable car in the Pyrenees, flying in an RAF Comet above the North Sea at 45,000ft and many exploits in Hawaii. The talk covers a wide range of astronomy, is lavishly illustrated and contains not a single equation!

Friday 3rd August 2018

From Standing Stones to Blasting Rockets
Matjaz Vidmar, Royal Observatory, Edinburgh

Global Space Industry is in a time of a radical transformation and is no longer the exclusive business of global superpowers or multi-national corporations. Matjaz will link the rich history of astronomy and space science in Scotland to exciting new developments in our ambition to follow these trends and expand our Space Sector. However, building a space industry ecosystem is not trivial - after all, who said it was not rocket science?

Friday 7th September 2018

Cassini : 20 Years of Discovery

David Paterson, Dundee Astronomical Society

The Cassini - Huygens mission to Saturn was launched in October 1997 took 7 years to reach the ringed planet, carrying out some interesting science on the way. Over the next 13 years Cassini made incredibly detailed observations of this mysterious gas giant, its multitude of moons, and the enigmatic rings, while the Huygens lander gave us our first glimpse of the strange, yet somehow familiar looking, surface of Titan. This talk will look at the engineering challenges of designing the Cassini probe and Huygens lander, the complexity of getting to Saturn, and the wealth of scientific data which has been returned over the 20 year mission.

Friday 5th October 2018

Astrophotography

Eric Walker, Highlands Astronomical Society

Longtime friend of SIGMA, Eric Walker, will share his knowledge about imaging the night sky, most of which he has done from his home built Beinn View observatory in the Scottish Highlands.

Friday 2nd November 2018

Lochaber to the Cosmos

Dr Alec MacKinnon, University of Glasgow

Alec will talk about the Ben Nevis Observatory, the Scots Nobel Prize winner CTR Wilson, and the origins of cosmic ray science with some modern stories on cosmic rays. This promises to be an interesting presentation with a mix of subjects from, high-energy astrophysics, particle physics to Scottish scientific history.

Friday 7th December 2018

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 Xmas raffle and an update on future planned events for SIGMA in 2018.

The second half of most meetings features an in-depth look into what you can see in Moray's night sky for the coming month, as well as Space and Club news with details of any forthcoming SIGMA events.

Correct at time of publication. SIGMA/Guest Speakers reserve the right to change a talk/venue - these will be updated on the website.

*Unless otherwise stated, monthly meetings are held at Birnie Village Hall, Thomshill, Elgin, Moray, IV30 8GY.
In the event of any changes/cancellations these will be advised on our website www.sigma-astro.co.uk*