

### SAGAS News Summary and Events Round-Up - February 2014

#### SAGAS societies support Stargazing Live



The wettest and perhaps windiest January on record did not dampen the spirits of SAGAS societies which, like other societies across the country, put in an enormous effort to support of BBC Stargazing Live. As well as running their own events several of our societies were asked to support the BBC directly by bringing telescopes to the massively attended public events at the Portsmouth Historic Dockyard and at the Royal Holloway University.

In Portsmouth Hampshire Astronomical Group (HAG) collaborated with Fordingbridge Astronomers, Maidenhead AS, Newbury AS and Wessex AS. Telescopes were placed in small groups around the Historic Dockyard including on the top deck of HMS Warrior which was built in 1860 as the world's first Ironclad warship. In addition to the telescopes there were many professional organisations involved including the Institute of Cosmology and Gravitation from the University of Portsmouth, Rutherford Appleton Laboratory from Oxford, and EADS Astrium based in Portsmouth which brought their full scale working model of the European Space Agency's proposed Mars Rover. During the evening there were live links across to the USA, the ability to see a real astronaut suit, comet making, and many 'hands on' science experiences.

HMS Warrior image used with the permission of the HMS Warrior Trust



At the Royal Holloway University Farnham Astronomical Society joined forces with Crawley AS, Guilford AS, Reading AS and Walton AS to give visitors the chance to use an assortment of telescopes and binoculars. The University buildings, a stage and inflatable domes offered a whole range of activities including the chance to talk to astronauts, DIY solar systems, dark

matter demonstrations and talks on astronomy and the night sky. Despite the chance to stay in the warm, visitors did not seem to mind the cold and the queues at the telescopes were a dozen deep for the entire evening. The UKMON set up a display in one of the university buildings which proved very popular with the visitors.

Many local events were also organised.



**Crawley Astronomical Society** collaborated with Oriel High School Maidenbower to run a series of monthly Star Gazing events at the School in December, January and February. They were able to observe on the December and February event dates but In January, because of cloud cover, they held a Telescope work shop in the School cafeteria. At the event Crawley had a surprise visitor – there is more on this later in the newsletter

**Worthing Astronomical Society** was less fortunate with the weather. Its event was scheduled for early January but strong winds, heavy rain and weather warnings prompted a cancellation. A rescheduled event fared little better. Although the skies were clear high winds made setting up a telescope impossible and so they made the best of a bad situation and observed with binoculars. The crescent moon was visible and Mercury just below it

It was a close call for **Farnham Astronomical Society** but in the end the weather cooperated with clear skies throughout the evening. This year the society returned to Frensham Heights School where they were privileged to be given use of the school's excellent facilities. The public were admitted from 7pm and things soon became busy. There was a queue at every one of the dozen or more telescopes that were set up on the school's astroturf pitch.



*Photograph by Isabel Cuesta, AFCC*



*Photograph by Tony Watson, AFCC*



Those wanting to escape from the cold wind joined us in the Frensham Heights School's prestigious Performing Arts Centre where, as well as telescopes and astronomical images, there were displays on meteor observation and radio astronomy. In the auditorium Kevin Pretorius gave a talk entitled 'How the night sky works' and Maurice Kent gave a talk on the asteroid impact threat, both of which attracted a sizable audience. It is thought that around 250 to 300 people attended in total, and many of these were family groups. The Aldershot and Farnham Camera Club kindly agreed to be Farnham's official photographers and giving and provided them with an excellent record of a great night.

**Eastbourne Astronomical Society** in collaboration with neighbouring society East Sussex AS enjoyed their most successful public

event. In fact there was concern that that the nine instruments available may not be able to cope with the numbers who might attend. The crowds started to arrive very quickly including many family groups. They came in so fast it was difficult to gauge accurate numbers but at least 200 people attended in all and there were queues to look through the larger telescopes. Peter Gill gave excellent beginners' slide presentations to packed audiences – some with standing-room only.

## Crawley AS receives a surprise visitor

The surprise visit by Al Nagler and his family from the USA gave Crawley AS a night to remember at its Star Gazing evening at Oriel High School. The event was blessed with a clear sky in a winter otherwise on record as the wettest yet recorded.

Al was in the United Kingdom on a visit that had seen him as one of the speakers at the European AstroFest where he had spoken on the development of his company's remarkable telescopes and eye pieces which give the observer an apparent field of view of excess of 100 degrees.



## Farnham AS member hoping for resolution to lighting nuisance



With encouragement and input from colleagues in SAGAS and inspired by the South Downs Dark-Sky initiative, Peter Campbell-Burns (Farnham AS) has been in contact with his local council planning office about new lighting installed at a nearby garden centre. This lighting outshines the nearby street lighting and creates a bright sky-glow that can be seen from a considerable distance. Thankfully the council has taken this matter seriously and Peter has been told that the Council is in discussions with the owners of the business. Peter commented that even in these times of increased environmental awareness developers are getting things wrong and this story shows that councils will at least listen to such concerns.

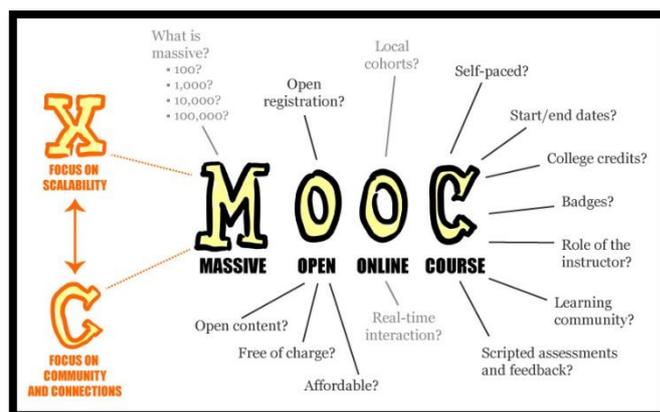
Where new developments are proposed that may affect the quality of the night sky local societies could be more proactive and perhaps even try talking to developers before development starts. Do any societies have any experiences to share regarding talking to developers and councils?

## Anyone for a MOOC?

MOOC is a new acronym to emerge from the Internet – it stands for Massive Open On-line Course. A growing number of top educational institutions from around the world are offering MOOCs and what's more, they are free! Farnham AS member's Danny Thomas and Peter Campbell-Burns are currently working their way through a course offered as a MOOC by Edinburgh University on the Discovery of the Higgs Boson. Their impressions are that the course material (video lectures, course notes, video transcripts) all delivered via the Internet is of extremely high quality and that these courses are not a "walk in the park"; they really do exercise your brain cells! The available courses are being added to all the time: in March the Open University is running a MOOC through <https://www.futurelearn.com/> which aims to explore the many moons of our Solar System.

Of course there are many other subjects available which aren't necessarily astronomy or science related. This is Danny's second MOOC, his first was on "Web Science and how the web is changing the world". This course was an interesting blend of technology and sociology, which he undertook for professional as well as personal interests.

(MOOC poster April 4, 2013 by Mathieu Plourde)



## UKMON Update

The UK Meteor Observation Network continues to grow and in 2013 the network recorded more than 13,200 meteor events. It is expected that in 2014 this count will be more than doubled.

Although 2014 has got off to a slow start due to the precession of lows hitting the UK, 2013 ended with a bang and a very successful Geminids during which UKMON ran a meteor watch over the Internet.

Meteor images were streamed to the UKMON Live website (<http://www.ukmeteorwatch.co.uk>) as they were captured whilst a supporting discussion was maintained over Twitter until almost sunrise. UKMON had a significant public following throughout the night. A summary of 2013 activity will be published on the UKMON website within the next couple of weeks.

A fireball much closer to home was captured by UKMON cameras on 15 February and already UKMON has published its analysis.



Images:R Fleet (Newbury AS), NLO



(Photo: Justin Whittaker)

Cameras in the UKMON network continue to record sprite activity, particularly Ash and Clanfield stations which have fields of view that cross the English Channel. UKMON is making its sprite data available to a researcher at the University of Bath who is interested in these atmospheric phenomena. What is clear is that UKMON is helping to show that these events are not as rare as has been believed previously.

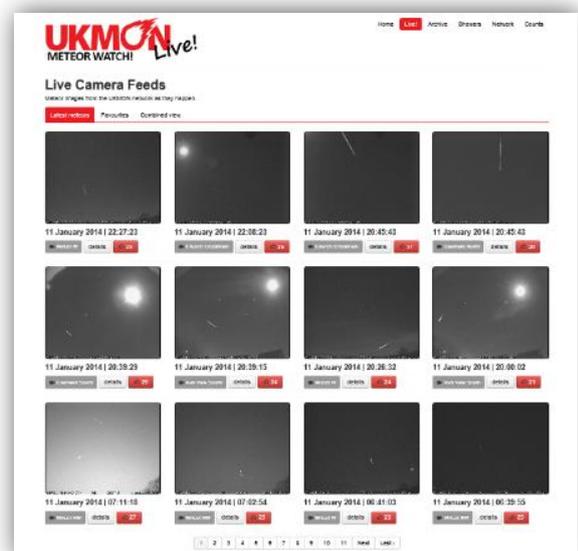
The team has great plans for 2014 and is looking forward to another successful year. For more information contact [ukmeteornetwork@gmail.com](mailto:ukmeteornetwork@gmail.com).

What made this special was that the analysis incorporated visual observations provided by the general public. UKMON cameras recorded only the initial part of the trail but a photograph taken by Justin Whittaker gave us a complete picture which we were able to combine with our CCTV data.

Our conclusion is that this was a slow sporadic meteor that came as low as 30km before ablation stopped.

A video of this fireball is available here:

<http://vimeo.com/86826858>



## Brazil Camera Network

In another exciting development UKMON was approached by a group in Brazil interested in setting up a camera network. UKMON (along with our EDMOND collaborators) has helped the group acquire cameras and we understand that some of UKMON's key guidance documents are soon to be being translated into Portuguese.

The group now has several cameras operating and are already seeing multi-station observations of meteors. They had a success recently with a spectacular fireball and their images made front page news. This is exciting stuff because it gives UKMON access to meteor data for the Southern hemisphere.

## Stephen J O'Meara talks to SAGAS Societies

Negotiations by members of the Eastbourne AS took place with the internationally well known writer, speaker and observer Stephen J O'Meara to undertake a lecture program whilst Stephen was in the UK in Early January 2014.

Eastbourne AS invited other SAGAS societies to share the costs with them and Hampshire AG joined in. Stephen spoke at Eastbourne Friday 3rd January followed by Hampshire AG on Friday 10th January. Members from other SAGAS societies in each respective area swelled the audiences significantly. He gave a fascinating illustrated talk on visual observing at both venues, describing his observing techniques with several tips for seeing more detail. Like how to keep your eyes well-oxygenated...

For more, browse "Stephen J O'Meara astronomy".

At the end of his talk Stephen and Hampshire attendees obviously had great fun as Stephen drew the winners of the raffle prize!



## Hampshire Astronomical Group New 24 Inch Telescope

The Hampshire Astronomical Group has been progressing well with this project. Initially envisioned as a five year project, the Group is pleased that fundraising went so well that it will be completed within two years.



Total cost of telescope is £100,000 plus additional money to convert the existing dome to take the new telescope. Total project cost will be in the region of £105,000. Funds are now secure and in place.

The telescope will be delivered at the end of June and will be installed by the German manufacturers. Commissioning will take place over the next few months. Official opening will take place on 4th October 2014.



The existing telescope will be decommissioned in three weeks' time and preliminary work has already started in preparing for this process. It will however, be retained for National Astronomy Week.

*The existing 24 inch telescope has been found a new home and negotiations are underway regarding the removal by the Group members and the new owners.*



(Images not individually credited: Peter-Campbell-Burns, Keith Brackenborough, Graham Bryant, Tony Questa, Adam Thomas)