



Southampton
Astronomical Society

Founded 1924

Newsletter

April 2008

www.southampton-astronomical-society.org.uk

NEXT MEETING Thursday 10th April
Robin Gorman "Why Pluto had to go"

Programme of Events

Thurs. 10th April:	Robin Gorman	Why Pluto had to go
Thurs. 24th April	Club Evening	
Thurs. 8th May	Bob Turner	So you want to be an Astronomer?
Thurs. 22nd May	Club Evening	
Thurs. 12th June	Christian Kaiser	Jets, stuff coming OUT of black holes
Thurs. 26th June	Club Evening	
Thurs. 10th July	Christian Knigge	Hubble Highlights
Thurs. 24th July	Club Evening	

Venues for Monthly Meetings

All Meetings start promptly at 7.30 pm.

Club Evenings and Observing Meets:

Maps to venues are available at the Monthly Meetings. Alternatively, please E-mail:

Stephen Cole (gabbs@fatcontroller.org.uk)

for a map.

Meetings on the 2nd Thursday of each month are held at:

Edmund Kell
Unitarian Church Hall,
Bellevue Road,
Southampton,
SO15 2AY.

Parking Arrangements: On-street parking is usually available in Bellevue Road. There is a car park in King's Park Road nearby. From the car park there is pedestrian access to Asylum Road. Please ensure that your car is securely locked.

Please note that our venue is accessible by Disabled Visitors

Contact Details:

President:

Dr. Lilian Hobbs

president@southampton-astronomical-society.org.uk

Treasurer/Membership Sec:

Michael Hobbs

secretary@southampton-astronomical-society.org.uk

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ADVERTS

Geoffrey Salt

Meade LX10 (8 Inch telescope)

8 Years old, this has been well used but still in **MINT** condition.

8 to 24 Zoom Eyepiece

9.7 Plossl Eyepiece

Magellan computer control system

£500

Please contact Geoff on 023 8090 7317

Lawrence Harris

Due to a pending house move, I am offering my **Observatory** for sale at a bargain price.

Approx 8 feet diameter with fully (manual) rotating dome. Prospective purchasers are invited to visit the dome to fully assess its condition and suitability without obligation. I use a 12" diameter S.C.T. and have been very pleased with the operations. The walls come in 4 sections bolted together, and the dome in 2 sections plus the shutter section. The original full installation booklet is available.

Originally priced at **£2,800** when new, I am asking **£800**.

Buyer dismantles and collects.

Contact

E-mail : lawrence@astronomer.plus.com

Help to Run the Southampton Astronomical Society

Can You Help Run the Society?

Anyone who has been in the society a long time, must have noticed a change in the way the society has been run since the death of John Thompson. We are not the efficient organization that we use to be. Everyone on the committee is doing a great job, but they all have full-time jobs as well.

If you are new to the society then you probably found out about us because Lawrence makes sure that various publications know about our meetings. If you have enjoyed the visiting speakers then Gerard has been coordinating the programme of events. Michael makes sure that you all pay your subs so that we have money to pay for the hall and visiting speakers. Stephen has very kindly taken on the role as editor so you get notified of what meetings are on (sorry about the dates last time). When you come to a meeting Ian has to be there because he has the only key to get us in the building and its one of these new keys that can't be copied. He also brings in all the equipment, screen and projector every time.

Lawrence will be leaving the society shortly because he is moving away and we thank him for all his efforts promoting the society and acting as our secretary. Lilian apologises that as President she hasn't been able to attend many meetings but this has been due to health and work reasons. Now Lilian is about to run her own company and she will have very little time to devote to the society in the next 12 months while she gets it off the ground.

So if you enjoy coming along to meetings and being part of the society then please can you help us. We desperately need people to help run the society. We can easily divide the tasks across many people which we have done so already, but if you can help then please contact Lilian on me@lilianhobbs.com as we URGENTLY need people to help on the committee.

Without these volunteers there will be no meetings to attend. So please help. We all lead busy lives but there is a nice feeling when you can give something back and help others enjoy your interest as well.

Lilian Hobbs
President

Minutes By Lawrence Harris

Monthly meeting 10th January 2008

Michael Hobbs opened the well-attended meeting shortly after 7.30pm, welcoming our guest speaker Dr Katherine Gunn, members and visitors. Following routine matters, the secretary reminded members of the forthcoming club evening and the next general meeting. Current observations of two bright comets were described by Lawrence Harris, who also noted news about asteroid 2007 WD5 that was now known to be not on course for a collision with Mars.

The guest speaker, Dr Katherine Gunn spoke about "New perspectives on the Early Universe using supercomputers and cutting-edge technology". Katherine is closely associated with Southampton University's Physics and Astronomy department, as a Visiting Lecturer, and had kindly agreed to talk to us about cutting edge computing and astronomy. She explained how the rapid progress of advances in computer technology had benefited astronomy, providing immense computing power to enable the computer simulation of the early universe. More astronomical observations had been added to the complex models, enabling astronomers to improve predictions about the history and eventual fate of the universe.

Katherine showed extremely impressive simulations of galaxies forming and colliding. She explained about the giant radio telescope arrays that were being constructed, and how the latest computers could analyse the huge amount of incoming data to simulate actually changing the direction of pointing without moving the collecting dish. The talk proved to have been an excellent start to the New Year.

Monthly meeting 14th February 2008

The February meeting started with a welcome from Ian Gore, and a note that the guest speaker had not yet arrived from Crawley. The secretary's notices were brief, regarding the next two scheduled meetings, and an item about software prices. Members' observation reports included recent observations of Saturn's disc and bands, and some general observations. Lawrence commented that the discovery of an inaccuracy in a manual and instructions had been realised, and after correcting this, his telescope images were now consistently good, enabling his best ever quality deep space images to be achieved.

Following a discussion about how best to proceed in the absence of the speaker, a NASA DVD called the 'Blue Planet' was shown. Part-way through this the speaker arrived so the film was abandoned while the equipment was set up for his talk.

Alan Drummond explained about how eclipses happened, and then discussed the figures that lead to eclipse cycles. By showing a list of all recent eclipses, Alan clearly showed how a particular eclipse sequence will be repeated after a certain number of years, and how one can predict the years that have 2 or more eclipses. Alan completed his talk by showing several pictures taken of recent eclipses, some from his bedroom. The meeting showed its thanks for his most interesting talk.

Monthly meeting 13th March 2008

The March meeting of the Society was held on Thursday 14th and opened by Lilian Hobbs who welcomed members and the guest speaker David Whitehouse. The secretary's notices included a reference to the forthcoming meeting of SAGAS (Southern Area Group of Astronomical Societies) holding its summer meeting in Basingstoke on Saturday 19 July with several well-known guest speakers. The need for a new secretary was noted due to the current secretary moving house this year.

David's talk was called 'The sun - a biography' and he started by explaining about the origins of typical stars, including the sun. Using many attractive pictures he illustrated the history of solar observations, showing illustrations of the earliest known observations of the sun, the discovery of sunspots, eclipses and the effects of solar flares on earth. David showed some excellent pictures of the details of sunspots taken with some of the world's finest solar telescopes. Graphs were shown to illustrate the periodic changes in solar activity and how there had been some long gaps between solar cycles. David suggested that the current new cycle had not definitively started, on the basis of a lack of a stream of new sunspots. After his talk he invited questions and many members posed queries covering a range of topics. His talk had been very well presented and he received loud applause from the appreciative members.



Hosts of the SAGAS Summer Meeting – Saturday July 19th 2008

Venue: Cliddesden Primary School – Basingstoke RG25 2QU

Transport from Basingstoke Railway Station available on request

Venue opens 1.00pm – Close by 7.00pm

Speakers

Dave Shave-Wall (retiring BAS chairman)

“An Amateur’s Journey”

Peter Birtwhistle BAA (Great Shefford Observatory)

“Practical NEO Work Where Amateurs Can Still Make A Contribution”

Guy Hurst (Editor - The Astronomer)

“The Search for Novae and Supernovae – from Visual to Laptop”

Trade Stands

Aurora Books, True Technology, Venturescopes

Refreshments throughout the day

Buffet Tea

Limited numbers: Bookings for reservations to john.stapleton@tesco.net

Charge £10

To cover room and facilities hire

**Speaker expenses, tea and
refreshments**

An occasional compilation of historical figures who have made the science of astronomy what it is for us today, together with a few personal comments.

Compiled by Geoffrey Salt

Angstrom, Anders Jonas, [1814-74].

Swedish physicist, helped pioneer the application of spectroscopy in astronomy using diffraction gratings to measure spectral lines in sunlight. In 1868, published Solar spectrum containing 1000 lines expressed in units of 10^{-10} metre, a quantity later named the Angstrom unit in his honour.

The Angstrom has been replaced by the nanometric S.I. unit of measure, one Angstrom = 0.1 nanometres. Amateurs have largely ignored spectroscopy, and I came to it too late to do anything useful in the field, a pity, for discerning what the stars are made of is in effect, identifying ourselves.

Porter, Russell W. [1879-1949].

American telescope maker, designed mounting for the Hale 5 metre Palomar Telescope. In 1920, with Albert Ingalls, [ed. Scientific American] produced books 1, 2 and 3 of Amateur Telescope Making, which seeded the A.T.M. movement in the USA, and subsequently, all over the World. Started the Springfield Telescope Makers in the 20s, which still holds its annual Stellafane Exhibition of amateur constructed designs.

In the first part of the 20th. century the art of making telescope paraboloids, largely perfected in the U.K., was virtually lost, and the only instrumentation available to the average amateur was the humble 3" refractor, which might turn up after years of searching second hand shops. Patrick Moore still uses one of these acquired in the 30s., cost: £7..10 shillings !

When the technique of parabolising recrossed the Atlantic via A.T.M. Book 1, it represented quantum possibilities in terms of instrumental size and cost to the amateur, and most astronomy societies of the period had mirror making classes, almost as a permissive Rite of Passage to the study of the Heavens. Not everyone had the essential tactile and engineering faculties to make and mount mirrors however, for at its best, mirror making requires the sensitivities of a concert performer.

In 1970, an enterprising Californian Tom Johnson, marketed an 8" S.C.T. under the tradename Celestron Pacific, which kickstarted yet another revolution in instrumentation for the amateur astronomer. Meade followed in 1970. The rest is history.

Somewhere, in some dinosaural den, the old art and rituals of mirror making may still be performed to construct perfect curves of revolution to the satisfaction of the worker, but the future seems to ultimately reside in internet borne images, or large S.C.T. Instruments.

Adams, John Couch. [1819-1892]

Researched perturbations of the orbit of Uranus, postulating these were caused by another, as yet undiscovered planet. Calculating an orbit and position for the unknown body, he informed Astronomer Royal George B. Airy, but no search was made. The planet Neptune was first observed by Johann Galle and Heinrich Louis D'Arrest observing from Berlin on September 24 1846, guided by calculations made independently by Urbain Le Verrier.

The circumstances of this discovery soured Anglo/ French scientific relations, but today credit is rightly given to Adams and Le Verrier jointly.