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Frank Johns,

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**SPRING 2006** 

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## FEDERATION OF ASTRONOMICAL SOCIETIES

http://www.fedastro.org.uk

## FAS Annual Convention 2006 to be in Birmingham 30th September

After several years at The Institute of Astronomy in Cambridge, it has been decided to hold the 2006 event in Birmingham.

Tel: 0121 608 5161

Tel: 01637 878020

EDITOR

Whilst the I of A, with it's collection of historic astronomical equipment, is a good venue, it does suffer from being a particularly difficult place to get to - for most of the visitors. It is hoped that Birmingham, being more central, will make travelling less onerous.

The event will be held at the Birmingham & Midlands Institute, which should prove to be an excellent venue. One real advantage the B&MI does have over IofA, is a range of eating places nearby, unless you are on a diet of course. Further information on the B&MI is given on Page 4.

We again have a glittering array of speakers this year, as you will see. It all should make for a memorable event.

The price of admission on the door will be £12. However tickets are available at £10, providing they are pre-booked. Orders yours now and be sure of it—and save money at the same time!!

Advanced tickets are being handled by Callum Potter, whose contact details can be found at the head of the front cover.

No time like the present—send off your booking now. See you in Birmingham.

Speakers:

#### **Professor John Brown**

Royal Astronomer for Scotland University of Glasgow

## **Professor Allan Chapman**

University of Oxford

### Dr Somak Raychaudhury

University of Birmingham

#### **Dr David Whitehouse**

Exhibitors booked at the time of going to press:

Society for the History of Astronomy

Society for Popular Astronomy

COSMOS Media

Aurorao Books

BAA Campaign for Dark Skies

**OUSAPS** 

David Bryant—Space Rocks

SCS Astro

I R Poyser—Telescope Maker

Birmingham AS

### **NEW DOME OPENS AT JERSEY ASTRONOMY CLUB**



The Jersey Astronomy Club has opened a new dome at the Sir Patrick Moore Astronomy Centre in the South West of the island. This completes the development of the centre consisting of two main units, the purpose built clubhouse and the dome.

The dome was gifted by club patron Sir Patrick in January 2004 during a visit by members to his home at Selsey. The 12 sections, stored in the garden for some years, required renovation, were brought to Jersey by club members. It took 15 months for a small team to return the unit to pristine condition. The dome named the Sir Patrick Moore Observatory was officially opened on November 7th 2005.

The facility, able to hold up to 10 adults, houses a 12 inch Mead cassigrain telescope with vision and computer lines running underground to the clubhouse. Images are projected onto a large screen or recorded on videotape. The clubhouse can seat around 40 people in comfort and is used for lectures and presentations to members and the public.

Visitors to the island can be sure of a warm welcome. Initial contact can be made to either: Chairman 01534 865896. Treasurer 01534 744510

## **Presidents Log**

First a few words of thanks to those that have gone before.

Thanks to Ron Kelley for steering the FAS through the last two years, and an especially big thanks to Clive Down who was secretary for many years. Sam George who takes over as Secretary from Clive has a difficult act to follow, but I am sure he is up to the job. Thanks also goes to Stan Waterman who has done an excellent job as meetings secretary over the past 5 years, and has stood down due to health concerns. John Parratt is also leaving the FAS Council after many years, and much thanks goes to John for all the many tasks he has performed over the years – always prepared to lend a hand, or tackle some job that needs to be done. Thanks also goes to Bob Dryden who continues to look after the slide collection, but is no longer a council member.

We held a council meeting in November and there was a very full agenda. A review of the just passed AGM and Convention and discussions about the 2006 event – which has recently been decided to be on the 30<sup>th</sup> September 2006 at the Birmingham & Midland Institute, Birmingham. We are now working on the speakers programme, and as soon as this is fixed up we will let you know through the Newsletter and website. We also looked forward to Astrofest 2006, and hope that this will be successful event this year – the FAS will be present in the Societies Room, so if you are along please stop by and say hello. Final discussions about the new Handbook were held, and in the near future this should be distributed to members. Thanks goes in particular to Frank Johns who has been spearheading the production of the Handbook (in addition to the Newsletter).

Publications were also discussed at the council meeting, and our main problem here is content. We have some old publications that are somewhat out of date and need revamping. We also need some new publications. Our principles are to produce small, cheap booklets that Societies can sell to members or the general public at your events. I would welcome input from Societies about the sort of publications we should be producing that would meet your needs. Also, if you have written something that might be distributed to a wider audience then please let me know. We are entirely open to producing new publications, so no holes are barred.

FAS finances are always on the agenda at our council meetings, and thanks goes to Peter Cooke for maintaining our accounts and records. Managing the finances of the FAS is a fine balancing act. We try to operate our core business cost neutral. So our income from subscriptions must balance the operational costs (newsletter, website, council expenses). Other items are self-financing, so costs of publications must be met by sales, the AGM/Convention costs are balanced by ticket sales, and the PLI costs are reflected directly to the members.

Finally (thank goodness I hear you say), it should be remembered that everyone on the FAS Council and indeed in your own society committees is doing it in their own time, because they want to. Committees are always looking for more help (in my experience) so I would strongly urge you to get involved. It can be fun, fulfilling, and it gives you something to do on those cloudy nights!

## **NOTICES**

Ilkeston & District Astronomical Society Silver Jubilee Convention - May 20th 2006

The Ilkeston & District Astronomical Society (IDAS) celebrates its 25th birthday in 2006, and to commemorate this achievement we are organising a special Silver Jubilee Convention. The event will take place on Saturday May 20th 2006, and will be held at the Heanor Welfare Centre, Wilmot Street, Heanor, Derbyshire.

We held a very similar event in May 2002 when we celebrated our 21st birthday, and many members of the audience that we spoke to were very enthusiastic about the Society organising another event. Our silver jubilee therefore seemed like a good excuse to organise another Convention.

The Welfare Centre has plenty of parking spaces, and is also conveniently placed as it takes less than five minutes to walk from Heanor's Market Square; where regular bus services from Ripley, Derby, Alfreton and Nottingham pick up and drop off. If travelling by train then Langley Mill railway station is just two miles away, where there are regular rail services from Sheffield and Nottingham. The Welfare Centre also has level access, and this can be important to some people.

Our Convention will run along similar lines to our 2002 event, with four speakers and with sufficient breaks in-between for refreshments. The list of confirmed Guest Speakers is as follows:-

Galaxies Prof. Michael Merrifield—University of Nottingham

Comets Prof. David Hughes (University of Sheffield)

Space Science in the UK & Europe - 2006

Prof. Ken Pounds (University of Leicester)

The Dusty Universe Prof. Nye Evans (Keele University)

## Partial Solar Eclipse at Lowestoft March 29th

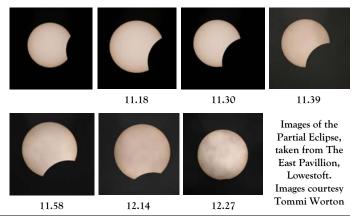
Once again, astronomers, members of LYRA (Lowestoft and Gt Yarmouth Astronomers) met along the promenade from the East Pavilion for another day-time astronomy date. Again, we have been fortunate in that the weather once again shone brightly which in contrast to our recent nightly vigils at Kirkley Observatory which have often been banked with clouds. This makes it 100%, what with the last year's partial eclipse as well as recent year's solar transits of Mercury and Venus.

The eclipse began on time: we were able to watch the full encounter and it was not until the end of the eclipse (egress) that the weather clouded over. Many passers by both those who were living locally and on holiday stepped up to view. Some resident on holiday or just passing through stated that it had made there visit worthwhile for not only did they see the partial eclipse but also three sunspots were on view which appeared very close to that quarter of the darkened disc.

We were able to tell them that this total eclipse phenomenon is one of those fortuitous encounters which will in the fullness of time - say a million years hence will be some long last cultural memory as the moon is forever gradually moving away from the earth- approx 2 cms a year: we know this from the calculations derived from lasers bounced off craft which were left in situ when we last visited the moon's surface. Without a doubt in future times, we will have other equally chance like encounters to enjoy such as binary stars rising over exoplanetary terrains or from afar as probes watch the dynamic birth of stellar systems break free from their darkened globules. Richard Chilvers LYRA Sec



Picture: Richard Chilvers LYRA



## KNOW THE COUNCIL MEMBER

#### Callum Potter—FAS President

A 'lang toun lad', I hail from Kirkcaldy, in Fife, Scotland, also known for linoleum, being the birthplace of Adam Smith and our esteemed Chancellor (at the time of writing!) Gordon Brown. A child of the space race, I remember well the Apollo missions landing on the moon which fired an interest in Astronomy and Space. At school we were lucky to be able to go on trips to the Mills Observatory in Dundee, where Harry Ford used a make-shift planetarium projector to explain the motion of the stars and planets and showed us magnificent views of the planets using their 10" Cooke refractor.

From Kirkcaldy I went to St. Andrews University to study Physics and Electronics, but was able to include a 1<sup>st</sup> year Astronomy module. I was an active member of the University astronomy society, and we were able to use some of the fine equipment at the University Observatory. St. Andrews was (is) an excellent place for observing aurora, and an alert network (pre-mobile phone!) meant that few were missed.

After university, work beckoned, and after working for a few years using my physics and electronics in the nuclear industry, I moved into software development and programming, and have continued in this

to this day. Astronomy took a back-seat during many of these years, with a subscription to Sky and Telescope and other books filling the astronomy gap, until a move to a dark location in Worcestershire some 10 years ago re-kindled the interest. My home is now equipped with a roll-off roof observatory which houses a 20" dobsonian. For 'mobile' astronomy I use a Borg 76ED refractor on a TAL equatorial mount. Although I work in a high-tech industry, I prefer my astronomy to be low tech, so a printed star atlas and not a computer or GOTO in sight when I am out at night. I have been tempted into digital imaging, though, and have been using a Canon 300d for the past year or so. But in a low-tech way – much like conventional film photography, but with the advantage of computer post-processing.

Outside of astronomy, on Sunday mornings in the winter months, I can usually be found at some rugby pitch helping out with our village Under 13s team. And occasional outings to see Gloucester or Worcester play, and of course supporting Scotland in the 6 Nations. In summer its cricket, either TMS on the radio, or an outing to the local matches played by Worcestershire or Gloucestershire.

#### Review - Coronado Binomite Solar Binocular

As you will realise after my PST article last year the sun holds a fascination for me, but the PST wasn't my first instrument made by Coronado. I originally bought a pair of the Binomite solar binoculars in July 2004. At the end of 2005 I added the Binomite II binoculars to my list of equipment.

The original Binomites are roof prism binoculars the size of a small pair of travel binoculars with the two  $25 \, \mathrm{mm}$  diameter objective lens coated with a white light filter. These instruments provide  $10 \, \mathrm{x}$  magnification of the sun. Weighing in at just  $250 \, \mathrm{g}$  these are extremely portable take anywhere instruments. The binoculars are supplied with a soft case and are fitted with an integral long bootlace strap.

The Binomite II binoculars are slightly larger and heavier than the average  $10 \times 50$  binoculars. The 60mm objective lens is coated in the filter but in front of this coating is a flat plain glass filter, providing protection to the coated surface. The magnification of this instruments is 12x and unlike the smaller binoculars these can be mounted onto a tripod using a standard binocular adaptor. These binoculars are the more common porro-prism design with a rubberised surface coating that provides a secure grip. Like the original Binomites these were supplied with a carrying case and a flat strap. This strap is quite narrow and I replaced mine with a wider camera strap for greater comfort.

The build quality of both instruments are very good the filters defect free

Just for interest I conducted a back to back test on the 2<sup>nd</sup> January 2006 of the two Binomites and compared them to my 80mm refractor fitted with a Thousand Oaks white light solar filter.

Looking at the sun with the refractor there was one sunspot group consisting of a large umbra, and a smaller umbra surrounded by a common penumbra. In addition there were two small sunspots further to the east with no perceivable penumbra.

Using the original Binomites the large sunspot group was visible but the two separate umbra could not be resolved. It was also difficult to distinguish the penumbra from the umbra. The solar disc was sharp and in common with my Thousand Oaks filter the sun has a warm orange colour. The small size and light weight of these binoculars make them fairly easy to hand hold and obtain a good view of the solar disc. The focus knob is on the bridge between the two barrels of the binoculars, the internal focus mechanism allows these binoculars to be left in focus and still fit into the case.

The Binomite II binoculars as you would expect from the magnification and size of the objective lens give a better view of the sun. When compared to the smaller Binomite the solar disc has the appearance of being over twice the size. With these binoculars the main sunspot group could be resolved into a figure of 8 umbra surrounded by a distinct penumbra. Whilst the two smaller spots could be seen they couldn't be split into individual spots. In this instrument the solar disc has a silver-blue colour that helps to increase the contrast of the visible features. Focusing these binoculars is achieved using the rubberised focus know located between the two prism housings, with the bright crisp image makes focusing easy. The increased size and weight (1.2Kg) of these binoculars make obtaining a steady image whilst hand holding more of a challenge, but when mounted on a tripod they will give a small refractor a run for its money.

So are the Binomites just gimmicks or serious observing tools. Neither of the binoculars could match the view through the refractor but then you wouldn't expect them to. The original aim for buying the Binomites was to use them to see if there were any sunpots before setting the telescope up and to provide a portable method of observing the sun when on holiday or away on business. The binoculars provide quick and trouble free access to the sun. The smaller Binomites are similar in cost to a solar filter for a small refractor and open the realm of safe solar observing to the casual observer. The Binomite II binocular have the same ease of use but with better resolution. Ideal for those days where the sun is playing hide and seek in the clouds. The better views through the Binomite II are worth the extra cost. The Binomite II binoculars suit those who want to visually observe the sun safely from wherever they may be. If I have one criticism of these binoculars (to be fair many other manufactures are just as guilty) is that the box art is far from representative of the performance of the instruments contained within. If the purchaser expects to see sunspots in the detail shown on the box they are in for a vast disappointment.

John Durston, Callington Community Astronomy Group

"What is that finger-like thing coming out of the sun?"

> Picture: Richard Chilvers LYRA



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## UTILIZATION OF SPACE TO DAY AND

Editors:- Berndt Feuerbacher & Heinz Stower. Publisher;- Springer-Verlag Berlin & Heidelberg GmbH & Co ISBN 354025002 Price £46.00 Hardback pp 410

**TOMORROW** 

It is not often that a completely new book comes to the market. This volume covers the complete field of science and its application in space. No less than twenty specialists contribute essays in subjects ranging from spacecraft to future challenges.

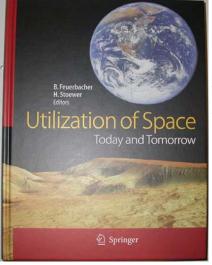
The target readership is professional scientists and engineers seeking to broaden their knowledge outside their own specialist areas. In addition interested lay people and those involved with protecting the environment will find it very useful.

Each chapter concludes with a number of references, mainly books, although some journals are included. There are also a number of web references.

With such a wide range of topics covered it is inevitable that some will be more relevant than others to the reader's need. The section on the ozone hole is limited to isolated paragraphs unfortunately.

Most astronomers regard space observatories as platforms for looking out away from Planet Earth. Feuerbacher & Stower devote six

### **REVIEWS**



major essays to "Looking down: our Earth", Climate and the environment is covered in detail and the book is very much up to date. There are useful references to the 2004/5 SE Asia tsunami and the way in which space-based observations can help to forecast and mitigate future disasters.

Two chapters are devoted to "Looking up: stars and planets. The major space observatories are covered including Hubble, Spitzer, Herschel, Planck and Chandra. One section looks forward to the James Webb Space Telescope and the work planned for it. Nearer to home there is only a passing reference or two to solar observations ie SoHo and nothing to Stereo and Solar B due to be launched this year with strong

British interest.

All in all an excellent contribution to space science and worthy of a place in any library devoted to environment and the part science plays in utilising it.

Brian Sheen Roseland Observatory

## Oxford Dictionary of Space Exploration ISBN 0-19-280631-9 Price £9.99

At first glance a dictionary of space exploration would seem to be too limited in its content to be of much appeal to the astronomer whose thoughts are entirely taken up with the stars. Most of us however extend our interests through to all general space matters and this is where the dictionary perhaps may come in useful.

It contains a brief but informative and accurate entry on all events in the history of space exploration and the people and organisations that made it happen from Konstantin Tsiolkovsky's theories in 1903 through to NASA's Mars rovers, Spirit and Opportunity. There are entries for not only the astronauts and hardware but also the scientists and theorists, in total there are over 2,000 entries and 50 diagrams and photos (for it's price I would have expected a few more photos).

At the back of the book there are also 17 separate tables that range from a list of the youngest space travellers to a detailed chronological list of all shuttle flights (useful for all the pub quiz and trivia buffs). It also helps untangle those banes of modern life the acronyms and in most cases cross-refers a meaningless string of letters to a more helpful entry. Another useful addition is the inclusion of over 250 links to relevant websites for further investigation.

We now come to what I consider is the main drawback of this book and that is who is it aimed at? Although it does indeed cover man's long and arduous efforts to boldly go into space it does so in a way that is only really useful if you already have a deep interest in the subject and therefore require it as a source book, however, I feel that the entries are too short and limited in their content to be of any real benefit and the internet would serve as a better source tool.

Being a dictionary it cannot be read in a way that will convey the true depth and excitement of this immense subject and is unable to present a chronological version of the history of space exploration that would appeal to the average person. Nowadays there is a plethora of coffee table glossy books that cover this subject in a more informative and entertaining way.

To sum up then this book does not easily fit into what is becoming an increasingly demanding market for the beginner or the expert and whilst it is full of information and the occasional golden nugget ultimately it will be of limited appeal. At £9.99 it is also probably too expensive to be considered a stocking filler and the money could be better spent in the bookshop. If however you should ever come across this book in the bargain basement then give it a go.

Dennis Gavin

Callington Astronomy Club

# Birmingham & Midlands Institute Venue for the 2006 FAS Annual Convention & AGM

Located in a
Grade II listed
building, the B&MI
is conveniently
located in the centre of Birmingham
where the city's
business and commercial quarter
meets the city's
cultural centre.
Several inde-



pendent societies are affiliated to the BMI, using its premises for their meetings and activities. These societies include FAS member—Midland Spaceflight Society—so they shouldn't have far to come!

The B&MI



website includes a location map and also a virtual tour of the place. Check out: http://www.bmi.org.uk/index.shtml

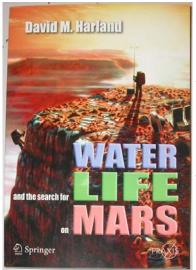
## WATER AND THE SEARCH FOR LIFE ON MARS

David M. Harland Published by Springer – Praxis, (2005)
In 1659 Christiaan Huygens observed dark markings cross the disc of Mars and correctly deduced that the Martian day, or sol, was approximately the same as an Earth day. Three hundred and forty six (Earth) years later the robotic vehicle 'Opportunity' completed its examination of the rim of Endurance crater on the Meridiani Planum and set off south towards the crater Erebus and the etched terrain to the north of crater Victoria. David Harland's book records the accelerating exploration of the Martian surface during the intervening years. The early chapters provide a detailed record of the telescopic and spectroscopic studies which fuelled the growing fascination with Mars during the first half of the twentieth century and which led to speculation concerning the presence of water, plant life and at times even of intelli-

The great bulk of the book concentrates on the on-going exploration of the planet by fly-by, orbiting and lander ro-botic vehicles launched by Russian, European and American

gent civilisation on the planet.

space agencies. There is a section of colour maps and images but the remainder of the book is generously illustrated with black and white images of spacecraft, lander vehicles, Martian terrain and close-up detail of rocks and other surface features which have undergone close analytical study. The technology of the early spacecraft and of the later orbiters and landers is presented in detail and



there is a chapter which discusses the nature and possible origins of complex microbial life. The importance of water to the development of life, together with the morphological suggestion of a Martian landscape sculptured by water, is given as justification that the robotic exploration of Mars during the past decade should 'Follow the water'. Great emphasis is given to the results of the analytic examination of surface features and rocks by the Viking, Pathfinder, Spirit and Opportunity missions and their interpretation is reviewed in light of the orbital remote sensing data and emerging models of Martian geology and climate.

This book paints an exciting picture of our evolving and at times contradictory and controversial views of the red planet. The attention to detail is impressive and will provide the reader with a body of knowledge crucial to a balanced appreciation of current and future investigative missions to Mars. 'Where is the water?' Is there life?' These tantalising questions are not answered in this book, but

the reader will appreciate the science which underpins the search for eventual answers and will be left with the certain view that we are close to finding the crucial evidence. David Harland provides a detailed summary of an astonishing scientific adventure. It is a timely and well presented review and with a memory of Holtz's emotive musical representation of Mars it is an absorbing read.

Brian Parsons February 2006

### Ilkeston & District Astronomical Society 25 Years of Astronomy (1981 - 2006)

Founded in October 1981, the Ilkeston and District Astronomical Society (IDAS for short) was the brainchild of a small band of amateur astronomers, led by the late Bernard Wheeldon. Bernard had the foresight to recognise that there was a large geographical gap between the Nottingham and Derby astronomical societies - a gap that was large enough to warrant the need for a new astronomical society to cover Ilkeston and the surrounding Derbyshire and Nottinghamshire towns.

The very first informal meetings were held in Bernard's own home, but with a growing membership it meant that a more suitable meeting place was needed. After some investigation, the Hayloft, at Erewash Museum, Anchor Row, Ilkeston, became IDAS's new meeting place - and we have met there, on the second Tuesday of each month ever since.

At our monthly meetings members are entertained by either a Guest Speaker or by one of the more knowledgeable members. We try and organise a good mix of talks that are suitable for all.

From February 2005 the Society began an additional monthly meeting, and this is held on the last Wednesday of each month at the Shipley County Park Visitor Centre, Slack Lane, Heanor. Starting at 7-45pm in the Green Room, these meetings are open to all members, but they are mainly aimed at beginners and those less knowledgeable members

Besides our monthly meetings, observing sessions also play an important role within the Society, and these are held at the nearby Shipley Hill. They are not only an opportunity for members to learn something new about the night sky, but they also serve as a social get-together. So, even if the sky does cloud over there's always something interesting to talk about!

The Society currently owns an eight inch telescope, which is available to members to use - free of charge.

Society trips are also a popular feature with members. Over the years Jodrell Bank has been a firm favourite, and in 2003 we made our fifth visit to the facilities. Over the years, other places of interest have included the Institute of Astronomy (in Cambridge), the Old Royal Greenwich Observatory, the Science Museum, and the Astronomy Centre (in Lancashire).

In recent years the annual Equinox Sky Camp (in Norfolk), has also become a major event with members.

Members also receive a bi-monthly Newsletter that gives details of up and coming astronomical events, and Society news. Articles and observations that have been written by members are occasionally included in the Newsletter, and are of great interest.

Even though IDAS has remained fairly small in size, our membership is not only lively and enthusiastic, but also very friendly as well. Members range from complete beginners, to armchair astronomers, through to knowledgeable seasoned amateurs. In short, everyone with an interest in astronomy is most welcome.

If you want further information about IDAS, please contact Mary McNulty (Public Relations Officer) on 01298 78234.

Why not visit our website:-

http://members.aol.com/idasastro/index.htm



I work at the Institute of Physics (<a href="www.iop.org">www.iop.org</a>), a charity, based in the UK that promotes physics in society.

We have a project called Moonwatch

www.crescentmoonwatch.org that we'd like to publicise to amateur astronomy associations.

Moonwatch is a mass-participation astronomy experiment that everyone can get involved in. All they need to do is look for the new crescent moon in the sky for a few days each month, and tell us when they first see it. If we receive enough observations then we'll be able to improve the accuracy of the lunar calendar.

There is an A3 poster that explains what the project is about. If you are interested please contact me.

Sam Rae sam.rae@iop.org

Our Spring conference this year is on the theme of women in astronomy and I wonder if I might enlist your help? I am doing a survey to find out how women members of astronomical societies became interested in astronomy, and what their /particular /interests are, e.g lunar observing, history, deep-sky objects. If I receive enough replies I am hoping to write a short report for the FAS Newsletter.

If any reader could supply me with this information, I would be extremely grateful. Any information given will be treated in the strictest confidence and no individual or society would be identified. Could you please contact me at: library@shastro.org.uk

or ring 01623 844121 (evenings only, answerphone). With many thanks.

Madeline Cox

Librarian & Councillor, Society for the History of Astronomy

I am trying to locate details of a Colin H Askham who lived in Liverpool 1920s-1960s, possibly later. He was a founder of the British Interplanetary Society in Liverpool in the 1930s, was a keen radio ham and had a number of telescopes - may have been an amateur astronomer. Please could you suggest where there may be local Liverpool Records. I note a reference to 125 yrs celebration forthcoming.

Thank you

M N Roebuck mr@roebuck.demon.co.uk

My thanks to Kath Redford of Salford AS for her patience in her efforts to get their entry correct in the listing. I hope all is now well.—ED

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#### SOCIETY ROUND UP

#### ABINGDON AS

Meets at the Methodist Church Hall, Dorchester Crescent, Abingdon, at 8.00pm. For more details telephone Bob Dryden 01491 201620 or visit our website www.abingdonastro.org.uk

8 May: The Weird and Wonderful Universe Paul Warren + AGM 12 Jun: Searching for WIMPS in the UK  $\,$ Prof Nigel Smith

#### ALTRINCHAM & DISTRICT AS

Meets at 8.00pm on the first Friday of the month (except July & August) at the Timperley Village Club Hall, 268 Stockport Road, Timperley. Altrincham

For more details telephone Don Utton 0161 941 4185 or visit our website www.astroadas.org.uk

#### AS OF HARINGEY

Meetings generally 3rd Thursday at Ashmole School, Southgate, London N14, at 7.30 pm www.ashastro.org.uk.

#### ANDOVER AS

Meetings 19:30 third Thursday of the month except August in Grateley Village Hall.

Secretary: Charles Roach e-mail: cjroach@worldonline.co.uk www.andoverastronomy.org.uk

#### AYLESBURY AS

Meetings take place at the Scout Hut, Oakfield Road, Aylesbury. Contact Simon Foster on 01844 216108 www.aylesbury-astronomy.org.uk

#### AYRSHIRE AS

Contact: Pheigi MacDonald email: pugzrocks@hotmail.com

#### BASINGSTOKE AS

Contact: Andria Harbinson email: andria.harbinson@ntlworld.com

Website: http://www.basingstokeas.org.uk/

#### BATLEY & SPENDBOROUGH AS

Contact: I Newsome 01924-443860 email: bevian11@hotmail.com

#### BEDFORD AS

Meets last Wednesday at 19:30, Bedford School, Burnaby Road, Bedford, MK40 2TU

Contact: , 01234 211532 society@bedsastro.org.uk

www.bedsastro.org.uk

#### BIRMINHAM AS

Wednesday Evenings at Aston Uni. Club Night; Library, telescope construction, & if it is clear observing at the Priory Observatory.

www.birmingham-astronomy.co.uk

23 May: Huygens Encounter with Titan Dr Andrew Ball 27 Jun: Eclipses of 2003/4 Antarctica & S Pacific Michael Gill 26 Sep: A Warwickshire Eclipse Mike Frost 31 Oct: In Pursuit of Pulsars Prof I Bell

#### **BOLTON AS**

Bolton TIC Centre on Minerva Road (near Bolton Royal Hospital), from 7.30pm to 9pm. Every 1st and 3rd Tuesday.

http://boltonastro.fateback.com/index.html. Secretary:Peter Miskiw.

#### BRADFORD AS

Meetings usually held on a Monday in the upstairs room at Eccleshill Library, Bolton Road, Bradford, BD2 4SR at 7.30pm until 9.45pm.

For any further information please see our website at www.bradfordastro.freeserve.co.uk or ring Hilary on 01274 6725711.

For information about weekly night-time observing ring Andy on 01274 413464 or John on 01274 419142; or for weekend solar observing ring Colin on 01274 586584.

### BRANNEL ASTRONOMY

Meetings on first and third Fridays of each month at Brannel School, St Stephens, Cornwall.

www.brannelastronomy.com

Contact: Frank Johns, 01637-878020

#### BRECKLAND AA

Open Meetings are on the second Friday of each month at Great Ellingham Recreation Centre near Attleborough, Norfolk at 7.30 PM.

Open meetings are followed by a tour and observing (weather permitting) at our adjacent observatory ,which houses a computer controlled 20 inch reflector. We also have a 9 1/4 inch celestron Scmitt-Cassegraine, an 8 inch reflector and an 8 1/2 inch reflector.

Further details and a full contact list are available on our website at www.breckastro.supanet.com telephone 01953 602045

Contact: Tony Osborne. Anthony@emanti.wanadoo.co.uk

#### BRIGHTON & HOVE AS

Four meetings per year at Patcham Village Hall, Brighton, BN1 8XR Contact J. Luvian-Wade tel. 01273 889112 john\_wade@ntlworld.com www.bhas.fsnet.co.uk/

Meetings held on Friday evenings at 7.15pm at Bristol Grammar School, Contact John Pickard (Vice Chairman), tel. 01454 632692 or Tricia Brown (Secretary), tel. 0117 968 5023

www.bristolastrosoc.org.uk

### CALLINGTON COMMUNITY ASTRONOMY GROUP

Meetings: First and third Saturdays (except August), at Callington Space Cen-

tre, Callington Community College, Launceston Road. Beccy Watson; callintonastro@kimwatson99.fsnet.co.uk

www.callington-astro.org.uk

#### CARDIFF AS

Meetings alternate Thursdays, September to July, 7.30 pm. at Dept of Physics and Astronomy, Univ. of Wales, 5 The Parade, Newport Road, Cardiff. David Powell (secretary), 029 2055 1704. Email CAS@ilddat.demon.co.uk www.cardiff-astronomical-society.org

#### CLEETHORPES AS

Meetings held at the Beacon Hill Observatory, Cleethorpes, start at 7.30pm. Contact Paul Thompson 01472 233552 or e-mail paul@cleethorpesastronomy.co.uk. www.cleethorpesastronomy.co.uk

#### CLEVELAND & DARLINGTON AS

Most monthly meetings held at Grindon Parish Hall.

Contact: Neil M. Haggath, 01332 740977, E-mail: neil.haggath@ntlworld.com

Meets second and fourth Thursday of every month at The Godolphin Club, Wendron St., Helston. Contact: Robert Beeman (01326-341164) Email: robert.beeman@btinternet.com or info@CornwallAS.org.uk www.CornwallAS.org.uk

#### COTSWOLD AS

Meets second Saturday of every month at Shurdington Church Hall, Shurdington, Cheltenham. 7.45 pm. Contact Duncan Willoughby (01452-416405) www.cotswoldas.org.uk

COVENTRY & WARWICK AS Contact S Payne 02476-474227

#### www.cawas.freeserve.co.uk CRANBROOK & DISTRICT AS

Contact M Hannan secretary@epublish.co.uk

www.cadsas.epublish.co.uk

#### CRAWLEY AS

Meets third Friday of every month (exc July & Aug) at Ifield Community Centre. 7.30 pm. (December dates can be variable)

Contact: Jim Swift 01293-882560 or 07973-142779 (mobile)

E-mail: cytron@btinternet.com and/or jimswift@btinternet.com

#### CREWKERNE & DISTRICT AS (CADAS)

Have outline planning permission to build an observatory, meeting room and work room in a dark sky site close to Crewkerne.

Anne Dodgson Crewastra@aol.com

#### **DUMFRIES AS**

Monthly meetings at the St. George's Churchhall, George Street, Dumfries 7 to 9.30 pm.September to May. For dates/details contact the Secretary Klaus Schiller at lesley.burrell@btinternet.com or 01387 269762

Society web-site www.astronomers.ukscientist.com

#### EASTBOURNE AS

Meetings on Saturdays at the Willingdon Memorial Hall, Church Street, Willingdon starting at 7.30 p.m. Contact Peter Gill, tel. 01323 646853, email pbj.gill@btinternet.com. www.EastbourneAS.org.uk

6 May: Jupiter Dr John Rogers 10 June: Astronomical Equipment for the Amateur Pete Gallon Bob Mizon 8 Iul: Theft of the Night

### EAST RIDING ASTRONOMERS

Contact Tony Scaife, email astrogen@astrogen.karoo.co.uk

#### **EWELL AS**

Meets 2nd Friday each month at Nonsuch High School for Girls, Cheam.

Secretary; Richard Gledhill, tel. 0208-393-1068

21 Apr: Wish you were here Dr Lillian Hobbs 12 May: Effects of Precession Robin Gorman 9 Jun: Astrobiology Dr Alan Longstaff 14 Jul: t.b.a. Ray Goodwin 8 Sep: Basic Astro-Photography Bob MIzon

#### FARNHAM AS

Meet 2nd Thursday at The United Reform Church, South Street, Farnham Secretary; Barry Bellinger, tel. 07748766610 barry.bellinger@nokia.com www.farnham-as.co.uk

11 May: Astro Imaging from Mauna Kea Nik Szymanek Steve Woodbridge 8 Jun: Observing Eclipsing Binaries 10 Aug: Solar System Maurice Kent

#### FLAMSTEED AS

Meets 1st Monday each month at Royal Observatory & National Maritime Museum, Greenwich. Contact: Friends Office. tel. 020 8312 6678 As well as a full programme of lectures and visits members assist astronomers at the Royal Observatory with many and various projects, such as assistance with the 28", the seventh largest refracting telescope in the world and regular public solar viewing sessions using the Society's own Coronado telescope.

### **GUERNSEY AS**

Meetings at the Observatory, Rue Lorier, St. Peters, Guernsey. Every Tuesday evening and Friday if clear for observing. Contact: Jessica Harris. 01481 247193

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#### GUILDFORD AS

Meet at the Guildford Institute, Ward Street, Guildford on the 1st Thursday of every month (bar August). www.guildfordas.org

Contact: John Axtell. 01932 341036 johnaxtell42@aol.com

#### HAMPSTEAD GARDEN SUBURB AS

Meets at 7.30 pm Room 3 (the Oriel Room) Free Church Hall, Northway, London NW11. Entrance via the door on the left side of the building. Contact: Dianne Fishman 020 8458 4038 hgsas@dfish.demon.co.uk

#### HANNEY & DISTRICT AS

Last Wednesday in month, 20:00hrs. Royal British Legion Hall, Hanney, Mill Orchard, East Hanney, Oxon, OX12 0JH

Contact: Mr J Walker 01235 771706 email: johnwalker@mac.com

#### HARROGATE AS

Meetings last Friday of the month. Harlow Community Centre, Harlow Ave. Contact: Lyn Smith 01937 531171 lynsmithbridgehouse@hotmail.com

#### HAVERING AS

Meetings 3rd Wednesday of the month. Cranham Community Centre, Marlborough Gardens, Upminster. Contact: Frances Ridgley 01708 227397 www.ccdland.com (follow link for Havering AS)

#### HERSCHEL AS

Secretary. Peter Snell, 128 Langley Road, Slough. SL3 7TF (01753 675634) Email: hasadmin@gmail.com

Meetings 1st Tuesday of the month at The Green House, Beechwood Business Park North, Inverness. Contact: Dr Pat Williams, Inverness Tel: 01463 793464 pat.williams@ndirect.co.uk.

#### HULL & EAST RIDING AS

Meets 1st Monday of month at 7.30 from Sept to April. Room 110, Wilberforce Building, University of Hull, Cottingham Road, Hull, HU6 7RX Contact: Sharon Long, Secretary. E-mail: charon@charon.karoo.co.uk

#### HUDDERSFIELD ASTRO, & PHIL. SOCIETY

Meetings at Observatory and at 4A Railway Street.

Contact: Paul Harper 01484-606832 www,huddersfieldastronomy.org.uk

#### ILKESTON & DISTRICT AS

Meets on second Tuesdays at Hayloft Erewash Museum, Ilkeston, Derbyshire and start at 7-45p.m.

Contact Mary McMulty, tel. 01298 78234 email: mintaca@msn.com 9 May t.b.a. Paul Money

13 Jun Cosmic Collisions Also meets last Wednesdays at The Green Room, Shipley Park Visitor Centre, Heanor, Derbyshire at 7.45 pm

Meets alternate Wednesdays at 7.30pm at the Teachers Training College, Stranmellis, Belfast.

Contact: Johns Hall e-mail: jimmyaquarius@btinternet.com

#### JERSEY AC

Meets 2nd Monday of the month, 8.00pm at Sir Patrick Moore Astronomy Centre, Les Creux Country park, St Brelade.

Contact: Eileen Besnard. 01534-860802 e-mail: hakmat@jerseymail.co.uk

Centenary House, North Street, Leeds between 7.00 pm and 9.30 pm Mailto: xavier@leedsastronomy.org.uk or xvermeren@gmail.com

Meets 2nd and 4th Tues 19:30. National Space Centre, Exploration Drive, Leicester LE4 5NS

Contact: Chris Gutteridge 0116 270 0596 chris@gutteridge.co.uk www.leicester-astronomical.co.uk

#### LETCHWORTH & DISTRICT AS

Meets last Wednesday of the month at Plinston Hall, Letchworth: 7:45pm

Contacts: Nick Ellis e.mail: ellis.nick@virgin.net

#### LIVERPOOL AS

Venue for monthly meetings is the Roman Catholic Cathedral's Crypt Concert Room, Mount Pleasant, Liverpool. Meetings commence at 7pm to 9pm. Secretary: Tel 0151-638 3270 or email: clarklunar@aol.com

#### LONDON HEATHROW TELESCOPE CLUB

Secretary: Duncan Fronteras

email: londonheathrowtelescopeclub@yahoo.co.uk

www.freewebs.com/londonheathrowtelescopeclub/index.htm

Meeting every Thursday at 8.00 pm. in the Scout Hall, Loughton Lane, Theydon Bois, Essex. Contact Jerry Workman (0208-507-7568)

#### LOWESTOFT & GT YARMOUTH RA (LYRA)

Tues 18th Feb AGM

Meetings normally take place on the  $2^{\mbox{\scriptsize ND}}$  Thur at the Sunrise Inn in Corton Road. All meetings begin at 8pm.

Richard Chilvers: 28 Blyford road, Lowestoft 01502 57401

email: good.goat@tiscali.co.uk www.lyra.gb.net

### LUTON AS

Meets last Thurs in month at University of Luton. LU2 8LE

Contact: David Early daval@kbnet.co.uk

www.lutonastrosoc.org.uk/

25 May: Venus Express Jerry Bolter 27 Jun: Past Volcanism on the Red Planet

MARR AS

Meets: Last Tuesday of the month at 1930, Learney Arms Hotel, Torphins. Observational meetings as weather permits

Contact David Pattullo, wolfscot@dialstart.net

www.freewebs.com/marrastro

#### MELTON & DISTRICT AS

Meets: Monthly at Village Hall, School Lane, South Croxton, Leics.

Observational meetings as weather permits

Contact: Andrew Atterbury - andy@att143.freeserve.co.uk-01664 812673

5 May: Observing Faint Variable Stars

Gary Poyner

Dr John Murray

2 Jun: Members Evening

11 Aug: Annual Barbecue

29 Sep: t.b.a. Dr Ann Bonell

#### MID KENT AS

Meetings of the society are held first and last Fridays of the month at The Bredhurst Village Hall, Hurstwood Road, off The Street, Bredhurst, Kent Contact: 01634 308035 email m.morrison-smith@lineone.net http://www.mkas-site.co.uk/

#### MILTON KEYNES AS

Meetings are held at Rectory Cottages, Church Green Road, Bletchley, Milton Keynes on alternate Fridays, starting at 8.00 pm.

#### MORAY AC

Meetings 1st Friday of every month starting at 7.30PM at Elgin High School, New Elgin, Elgin, Morayshire. Observing Evenings every Friday from mid September at The Bothy, Easterton Airfield. For details contact Ian Brantingham on 01466 771371 or ian@branters

freeserve.co.ukWeb site: http://www.sigma-astro.co.uk

#### NORTH EAST LONDON AS

Meets normally on the third Sunday of each month (excluding August) between 3pm and 6pm, in the Park Room, Wanstead House, 21, The Green, Wanstead. Contact Bernard Beeston, tel. 020 8363 5696

Public meeting at 7:30pm on the third Thursday of every month (excluding August & December) at the BT Exchange Social Hall in Collingwood Road, Witham. For more information contact (01376) 521897.

http://www.neas.org.uk

#### OFFA'S DYKE AS

Contact: Graham Arnold 01547 530205

#### ORWELL AS

email ipswich@ast.cam.ac.uk www.ast.cam.ac.uk/~ipswich

Roy Gooding (Secretary) 01473-462977

#### PAPHOS AS (CYPRUS)

Meetings 2<sup>nd</sup> Wednesdays of the month at Tsada Golf Course, Paphos, with 2 overnight stays during the year and some dark site observing.

Tel: 00357 26 936041 e-mail: dbrown@logos.cy.net

#### PAPWORTH ASTRONOMY CLUB

Meets at Upper Pendrill Court, Papworth Everard, nr Huntingdon on the first Wednesday of every month at 19.30. Contact Keith Tritton phone 01767 677219, email kpt2@tutor.open.ac.uk 3 May: Apollo Missions to the Moon Andy Green

#### PETERBOROUGH AS

Meetings are held on the first Tuesday each month at 7.30pm, at St Kyneburgha's Cedar Centre, Castor, Peterborough.

Contact: Gerry Holland (secretary) - phone 01733 772236

Email: gerry@comrep.freeserve.co.uk

www.pas-stargazer.co.uk

#### PORT TALBOT AS

Meetings are held on the first Tuesday each month at 7.15pm, at Mozart Drive Community Centre, Sandfields, Port Talbot.

Contact: Andrew Short (secretary) - phone 01639 765146.

Sept to April: Weekly Wednesdays meetings are held. May to August: 1st & 3rd Wednesdays only. Meetings 7.30pm, at Room 115-Level 1, University of Salford, Maxwell Building, The Crescent.

Contact: Kath Radford - phone 0161 794 3179. email: mail@howarddazeley@demon.co.uk

### SCARBOROUGH & RYDALE AS (Note the change of name)

Public observing nights at The Astronomy Centre, Dalby Forest, Thornton Dale, near PICKERING, North Yorkshire, on the first Friday of the month. Contact 01723 500389 email: sdas@scarborough-as.org.uk

www.scarborough-as.org.uk

#### SEKAS (SOUTH EAST KENT)

We are an active one, have excellent speakers, and are very sociable too !!! Instruments include a 20" DarkStar dobsonian, and ccd work is pursued by a good number, as well as h-alpha solar observation ,traditional observations, public observation nights, etc. Contact: Tony Bennet 01843-831079 Secretary@sekas.co.uk www.sekas.co.uk

### SHETLAND AS

Meet monthly, South Mainland, Shetland

Contact: Peter Kelly Tel: 01957 733242 theglebe@zetnet.co.uk

Speaker meetings are generally held on the first Friday of the month at Gate-

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#### LIST OF OFFICERS 2004/2005

President, Secretary, Treasurer & Newsletter Editor - See cover

Vice President: Ron Kelley

E-mail:vicepresident@fedastro.org.uk

PLI & Publications Distribution Sec: Eric Hutton E-mail: plisecretary@fedastro.org.uk

Membership Sec: Shaun O'Dell E-Mail: membership@fedastro.org.uk Meetings Organiser:

see Secretary Minutes Secretary: **Richard Sargent** 

E-mail: minutes@fedastro.org.uk

Website Coordinator: **Gary Gawthrope** 

E-Mail: webmaster@fedastro.org.uk

Chilterns Group : Ian Coulson

E-mail: chilterns.rep@fedastro.org.uk

**VACANT** South West AA Rep: East Anglia Group: **VACANT** North West Group: **Richard Sargent** 

E-mail: north.west.rep@fedastro.org.uk

SAGAS Rep: VACANT

E-mail: andy.corvette@tiscali.co.uk

West Midlands: **Andy Salmon** 

E-mail: west.midlands.rep@fedastro.org.uk

Yorkshire Group: **Paul Harper** 

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way in Shrewsbury with a monthly observing meeting at Rodington Village Hall Phone 01952 820082 for details. www.shropshire-astro.com 5 May: Wide Angle Search for Planets Dr Peter Wheatley

SIGMA MORAY A C

Meets first Friday of the month at Birnie Village Hall, Near Elgin Contact: Ian Barntingham email: ian@branters.freeserve.co.uk www.sigma-astro.co.uk

SOCIETY FOR THE HISTORY OF ASTRONOMY

Contact: Stuart Williams, secretary@shastro.org.uk www.shastro.org.uk

SOLENT AMATEUR ASTRONOMERS

Meetings 3rd Tuesday 19:30-22:00. Room 8, Oaklands Centre, Fairisle Road,

Lordshill, Southampton

Contact; Ken Medway. 02380-582204 ken@medway1875.freeserve.co.uk www.delscope.demon.co.uk

SOUTHAMPTON AS

Meetings are held at Edmund Kell Unitarian Church Hall, Bellevue Road at 7:30pm on the 2nd Thursday of the month.

Dr Lilian Hobbs - Secretary 023 8026 3319

Secretary@southampton-astronomical-society.org.uk

11 May Was Einstein 100% Right? Prof Malcolm McCallum

Dr Robert Smith

Andy Lound

Solar Neutrinos 13 Jul Short Talks by Members

STAFFORD & DISTRICT AS

Meetings held at Weston Road High School, Stafford. 19.15

Contact L Hodkinson, 01785 712065

Meets monthly in the Jubilee Room of Cavendish Memorial Hall, Cavendish, Suffolk on the first Tuesday of every month at 7.30 p.m.

Contact K. Marshall, 01787-249534

STRATFORD UPON AVON AS

Meetings 7.30pm at the Home Guard Club, Tiddington, Nr Stratford upon Avon. Contact: Mike Whitecross 01789 731784 www.astro.org.uk

SUNDERLAND AS

Meets 2nd & 3rd Sunday at 19.00hrs

Contact: Graham Darke 0191 415 2625 darke@bun.com

www.sunderlandastro.com

SWANSEA AS

Meetings held at 7.30pm in lecture theatre C of the Science Block at the Uni-

versity of Wales Campus, Swansea

11 May: The Exploration of Titan

25 May: A G M + Members Talks

Meetings are held first Wednesdays (except August) at 7.30 p.m. at The Methodist Hall, High Street, Horndon on-the-Hill, Essex SS17 8LN

Contact: Roy Hookway Tele;01375 676602 email: roy.hookway1@btinternet.com

web: www.thurrockastronomv.com

TIVERTON AS

Meetings are held Fridays at 7.30 p.m. at St Aubyn's School, Blundells Road, Tiverton.

Contact: Neil Purves 01884-277425 ww.tivas.org.uk

Prof Mike Disney 5 May Dark Galaxies 9 Jun The Lord of the Rings Andrew Lound

TULLAMORE AS

http://www.iol.ie/~seanmck/tas.htm

UNIVERSITY OF BIRMINGHAM AS

We are a University society with the majority of our members being Undergraduate students, but we always welcome people along.

Contact Kym Moss, email: kjg494@googlemail.com

www.astrosoc.org.uk

USK AS

Contact: jbprince9@yahoo.co.uk www.uskastronomicalsociety.org.uk

VECTIS AS (Isle of Wight)

Meetings held in Parish Hall, Town Lane, Newport.

rosemarypears@aol.com website: www.wightskies.fsnet.co.uk

WADHURST AS

Meetings held on third Wednesday of month at the Methodist Church Upper Room, High Street, Wadhurst.

Contact: G G Rathbone, 13 Brookfield, Kemsing, Sevenoaks, Kent. TN15

WEST CORNWALL AS

Meets first Wednesday of month at St Michaels Hotel, Falmouth, and

Third Thursday at the CPR Learning Centre, Camborne

Contact: Robin Wadding email: robinwaddling@westcornwallastrosoc.org

Website: www.westcornwallastrosoc.org

WEST YORKSHIRE AS

Meets every Tuesday of month at 7.30pm at 'Rosse Observatory', Carlton

Rd, Pontefract. Contact: Ken Willoughby 01977 795535.

www.wvas.fsnet.co.uk Email: ken.willoughby@btinternet.com

WEALDEN AS

Meets third Wednesday of month (exc Aug) at 7.30pm at Upland Community College. Contact: Keith Woodcock. Email: wealdenas@hotmail.co.uk

WHITE PEAK ASTRO OBS GROUP

Meets Hopton Cottage, Hopton, Top Hopton, Derbyshire, DE4 4DF Contact: Robin Spencer. Email: thespencers@care4free.net

www.wpaog.co.uk/

WOLAS (West of London AS)

Secretary: Duncan J Radbourne. 49 Wellington Road, Hatch

End, Pinner, Middlesex HA5 4NF. Email: duncan.radbourne@gmail.com

Website: www.wolas.org.uk

WOLVERHAMPTON AS

Meets alternate Mondays, at 7.30pm, between September and April, with additional meetings in May and June, at Beckminster Methodist Church Hall, Birches. Contact: Sydney Crump (tel 01299 871606),

WORTHING AS

email secretary@wolvas.org.uk www.wolvas.org.uk

Comtact: Graham Boots meeting\_secretary@was.org.uk 01903 505346 10 May: Our Vital Moon Robin Gorman

14 June: t.b.a.

Andrew Coates 12 July: Venus Express 13 Sep: Sir Arthur Stanley Eddington Mark Hurn

YORK AS

Meetings are held in the Denham Room, The Priory Street Centre, York, Meetings start at 7.30 for 8pm. Members £1.00 Non-members £2. Children under 16 are free. Contact Martin Whillock on 01347 821849

www.vorkastro.co.uk

Details of meetings mentioned in the Society Roundup should be confirmed before travelling. All programmes may be subject to change with no notice. The FAS can accept no responsibility for any inaccuracies. However if the details of your society are incorrect, or indeed if you aren't included, please send details to the Editor.

Deadlines for submission for newsletter in 2005/6: Autumn 2006 - 18th August 2006 Winter 2006/7 - 15th December 2006

Please remember to send ALL items to the Editor, Frank Johns. Regrettably material can only be returned if supplied with a SAE.