

The free Astronomy Directory for the entire Southern England, West up to the Midlands, Home Counties & East Anglia

Nov 2010-Jan 2011

Issue 04 Quarterly

ISSN 2040-8609

Moon Race 2020 Can we afford not to?

Culture Un-Club Less rules = more fun...?

> Public Outreach Go hug a telescope.

Space Tourism SpaceShipTwo flies!

80+ Astronomy Groups across the South!

HantsAst

Up to date news & info on astronomy and space across the whole of the South of England every quarter

news | reviews | space | what's on | out there

AstroSouth the community

AstroSouth Nov 2010 - Jan 2011 issue 04

Astronomy Groups of Southern UK

Berkshire - P6-7 Herschel AS, Maidenhead AS, Newbury AAS, Reading AS,

Cornwall - P10 Cornwall AS, Brannel AS, Callington Community AS,

Devon - P11, P13 Norman Lockyer OS, North Devon AS, Plymouth AS, Tiverton & Mid Devon AS, Torbay AS, Bridgend AS,

Dorset - P14 Wessex AS

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Foredown Tower Astronomers, Crawley AS, Eastbourne AS, Lewes Astronomers, Wealden AS, East Sussex AS, Wadhurst & Ticehurst AS



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AstroSouth

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Space Industry South

Contacts and Details

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Contributors:/behind the scenes: Graham Green, Sharon Rose, Martin Saban-Smith, Iain Melville, HantsAstro CoreTeam & our supporting Advertisers.



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Picture info: Alan Williams Turret - Location Seacombe Cliff, Worth Matravers, Isle of Purbeck - Picture Graham Green



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First Contact

Welcome to the fourth edition of the AstroSouth Directory.

Firstly – apologies for the delay. The team has been busy working on HantsAstro and our new sister publication – AstroNorth. We shall endeavour to make more regular issues a reality, in the meantime the last issue has been downloaded regularly, not just in the UK, but all over the world! In this issue you will read an update to the Moon Race, since the USA has changed NASA's funding. Also, talking of world-wide things, there is a growing phenomena known as the 'un-club', this may seem controversial but it cannot be ignored; astronomy groups are changing. As you will read there are lots of advantages and few downsides to this new breed of astronomy group. But then we've always been a little controversial - that's what astronomy is about pushing the boundaries.

It's been a great start to the season weatherwise, let's hope it holds. Enjoy the read.

David Woods Publisher – AstroSouth.org



AstroSouth Three steps forward, two steps back...

The summer has not exactly been a quiet one for us at AstroSouth Towers (!) as we have been busy gathering more information on groups across the South. Some of these aren't only members of the Federation of Astronomical Societies (FAS) and the British Astronomical Association (BAA), but informal groups ('Un-Clubs' see page 20-21) who operate via web forums such as StarGazers' Lounge or Normally, I would not discuss Look Up! who have contacted us directly.

Some of these organisations also have out before mid-November. regional groups; though less well known, they play an integral part of gluing the astro community together with regular meetings to discuss various issues.

HantsAstro has finally been accepted by one of these, and is now a member of the Southern Area Group of Astronomical Societies (SAGAS), whose 25 member societies meet guarterly at the Sir Patrick Moore Planetarium in Chichester, West Sussex. Their meetings are well attended by groups from mainly across the South East of England. The main issue with area groups such as these is the logistics and costs of getting together and I believe that the national bodies should be assisting these organisations financially to ensure their smooth running and continued operation.

If anything, there should be more regional arms of these national bodies.

Sharon Rose - membership@ hantsastro.org – has been gathering as much information as possible on all the groups across the UK, both established and informal. If anyone wishes to be added to our listing then please get in touch with her. We believe that we are the only publication that updates its information on a regular basis. There are many online astronomy 'directories' but this information often goes out of date and we have checked back on several societies' information, and found it to be over 7 years old!

All astronomy groups should ensure that their information is kept up to date for their online presence as this is how many groups passively advertise themselves. We will be creating our own dedicated website for AstroSouth and AstroNorth by the end of the year, and you will then be able to submit updated contact details as well as information on any events you may be running. There will be no charge for this service as we are currently seeking sponsorship to cover hosting costs.

our other publication, but the good news is that finally the next issue is due

I receive dozens of emails every month regarding the next issue. Simply put –

we need more content. We have been producing a 48 page publication with a team of just four people; this is a fraction of the production team size needed for a commercial 'paid for' publication. The same team also contributes to the running of HantsAstro (now 215* members).

The last issue of Look Up! was in March 2010 and is still being downloaded constantly at similar levels to when it was first issued. Due to various reasons it has been a very haphazard affair, however it still has a strong following. If you have any articles you would like to submit, or if you would like to comment on anything, then please contact Dave Woods at david. woods@hantsastro.org

The team has been busy over the summer creating new content for the next six months, but we can always do with more.

So far, the weather since September has been favourable for astronomy and hopefully this will continue. The IYA 2009 sparked off a lot of activity within the astronomy community, in terms of Public Outreach, re-vamped websites and better communication within their membership. However, 2011 may be their year of austerity with a number of groups reporting declining membership due to cuts in Government spending and grants at



Picture: Graham Green MoonFest@Alton 2010



local level will be harder to come by. So - please e-mail me your stories, Inevitably some of the larger groups will suffer more because they require more than just subscription fees to operate. The challenge will be to pursue astronomy at the same levels as previous years but without increasing current costs.

As I previously said in issue 3, there has to be a degree of 'business' thinking and this regrettably may come to the fore as time goes on. If amateur astronomy in the UK is to flourish and survive even the next 25 years, then it has to be treated as an amateur science as well as an important hobby. However, that does not mean that bureaucracy and red tape should be allowed to take over. With budgets being cut across all sectors - education cannot be seen as one of the last bastions of funding, I believe the whole astro community (including retailers, importers and manufacturers) should all be working together to ensure their mutually beneficial survival.

I always very much look forward to receiving more comments and views and also look forward to publishing some other voices within the ever improving 'AstroSouth Directory'.

images, letters, seminar details and events to: david.woods@hantsastro. org

Wishing you Clear Dark Skies,

David Woods AstroSouth.org November 2010

*PS. According to our records HantsAstro has now become the largest astronomical group in the South of England in just two and a half years. This has been achieved with a programme of resource development which now includes telescopes up to 16" diameter, an extensive Public Outreach programme and these publications - all this without subscription fees! Graham Green and I would like to thank the Core Team and all those involved in exceeding everything we thought possible. This isn't our success - this is vours. Thank vou.

Postscript...

In our last issue we wrote about insurance cover and the response that we had back on this was overwhelming. I didn't quite expect it would cause the furore that it did, however, it's all been quite positive. The Federation of Astronomical Societies (FAS) PLI cover now offers even better value as it also covers member-to-member. Whilst this improves upon their existing PLI cover - we put our money where our mouth is and purchased Community Cover from AstroSure, which reduced our annual premium by 30% and trebled our level of cover as well as making it much more comprehensive. Your mileage may vary.

I have since learned that many astronomy groups do not go out to tender and I strongly urge that when renewal times comes just like any other insurance – you check around and see if you can save yourself some money. This isn't insurance advice – it's just plain common-sense.

HantsAstron 05

DW

AstroSouth^{org} Berkshire

Interesting local Astronomy talks take place in Berkshire every month, so please check the relevant web-site for any updates andd contact details. Why not pay them a visit and support astronomy on your doorstep!

Herschel Astronomy Society

www.herschel-astrosoc.co.uk hasadmin@gmail.com

Formed in 1966, they have a band of active astronomers and a full programme of lectures. Meetings are held every second Friday of the month in Eton, close to the Society Observatory in Common Lane. Please contact their secretary for the precise address. For further information you can contact them by e-mail or go to their website.

Maidenhead Astronomical Society

www.maidenhead-astro.net mbandrews@maidenhead-astro.net

This society has been going since 1957 and offer a broad spectrum of astronomical activities. Meetings are on the first Friday of each month from September to June, in the Church Hall, St James-the-Less, Stubbings, Maidenhead, Berks, SL6 6QW. Please go to their website for further details.

Newbury Amateur Astronomical Society

www.newburyas.org.uk www.twitter.com/Newburyas monjohn.balstone@virgin.net

This society was founded in 1981 and are based in Newbury, West Berkshire and welcome members and non-members alike of all ages and abilities to all their meetings. There are two sides to this society - the speakers section and the beginners section which is open to all ages and abilities. They also observe from other local dark sky sites and have a range of their own telescopes. These meetings are held on the first Friday of each month from September to June and start at 7.30pm. Location: United Reformed Church Hall Pembroke Street (off West Street) Newbury .

The Beginners Meetings are held at St. Mary's Church Hall, Greenham, every third Wednesday of the month. See their website for further details.

AstroSouth

Nov'10 - Jan 2011

Planetarium shows and events take place across the South of England. Please check relevant web site for updates and contact details.

The Peter Harrison Planetarium

www.rog.nmm.ac.uk The Peter Harrison Planetarium is based at The Royal Observatory Greenwich, National Maritime Museum in London and has a 116 seat digital planetarium. They offer a wide range of shows for schools and the general public, including the prerecorded shows and live presentations by Royal Observatory Astronomers. It operates the well regarded Digistar 3 system and is the only planetarium in Europe utilising the high resolution E&S laser projection system, providing a vibrant visual experience. Robert Edwards 0208 3126531 bookings@nmm.ac.uk

INTECH Science Centre + Planetarium Winchester, Hants

Cost £2 per show in addition to exhibition entry Cost - £6.95 Adults £4.65 under 14 Check site for schedule www.intech-uk.com

Hershel Museum of Astronomy

If you have any talks or events

Events

Various Monthly Shows Check site for details + times and booking http://www.bath-preservationtrust.org.uk/index.php?id=8

AstroSouth Berkshire

B is for: **Big Bang!** The theory that suggests that the universe was formed from a single point in space during a cataclysmic explosion about 18 billion years ago. The force of the explosion accounts for the current expansion of the universe. The Large Hadron Collider is trying to discover how this started, by finding the somewhat elusive 'God' Particle ...

Reading Astronomical Society

www.readingastro.org.uk www.twitter.com/ReadingAS Chris.Menmuir@readingastro.org.uk

The Reading AS has two groups, a main section which meets at St. Peter's Church Hall, Church Road, Earley, Reading, RG6 IEY, and an 'astro-basics' section which meet at the Lodden Room, Dinton Pastures Country Park, Davis Street, Hurst, Reading RG10 0TH They hold public observing sessions throughout the year. For more information please go to their website or email them at: info@readingastro.org.uk

Reading AS Events/Talks Listing 2010

They hold public observing sessions throughout the year. For more information please go to their website or email them at: info@readingastro.org.uk

Reading AS Events:

November 20th

WOULD YOU BELIEVE - WE PUT A MAN ON THE MOON Jerry Stone (Spaceflight UK)

Some people have suggested that the Apollo astronauts did not land on the Moon; instead, their activities were filmed in a studio on Earth, possibly at the infamous "Area 51". Were the Moon landings a hoax, or truly mankind's greatest achievement?

December 11th (NOTE 2nd Saturday) PLANETARY NEBULAE

Owen Brazell (The Webb Deep-Sky Society) Owen will present a selection of stunning images of planetary nebulae taken with the best telescopes in the world. Followed by the RAS "Christmas Special"

Please ensure your details and events are up to date! Please e-mail your latest information and Press Releases to: sharon.rose@hantsastro.org



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bookings@nmm.ac.uk

The Astronomy **Road Show**

Sittingbourne, Kent We can travel up to 150 miles from Kent. We can incorporate other subjects in our shows Over 100GB of material is available as well as models, geology samples & meteorites for the shows.

phone:01795 420 372 www.astronomyroadshow.com astroroadshow@blueyonder.co.uk

Events



Culture **Un-Club**

Words: David Woods **Picture: Graham Green**

... Do you really want hurt me?

www.astrosouth.ord

Since starting HantsAstro in March 2008, a different type of astronomy group is emerging throughout the UK.

Unlike the formal astronomy societies that may have been operating for many years, this new 21st Century phenomenon which came from the USA (known as the 'un-club') has been gaining opularity.

joining a traditional society can seem at first a bit like joining a clan. It can be quite intimidating if you are entering a group with people whose knowledge and experience is much higher than yours, but this isn't entirely true. All societies are indeed a friendly bunch of peopl who share a like minded passion fo astronomy. But ultimately it's the way they are run that defines them.

In the early days a number of astronomy groups were rur effectively as 'Gentlemen's Clubs' often with a wealthy patron (usually a scientist of some type or a professional such as a doctor). This evolved into what some may call the

of the 20th Century, astronomy was have taken elements from the un- The reason why the new model becoming increasingly popular and club culture and have adopted it works so well is because there these societies for astronomy were to a more formally run society, are fewer rules and more time just that: Societies. They would often but without the requirement for a and energy is spent on astronomy contain a council or committee and Constitution or Committee. would be built around a formal constitution, which continues to If you read the Constitutions of some responsibilities to running any this day. The new 'un-club' model is designed around a co-operative, into their construction, when in fact issue is how you care and look after usually without a constitution but they should, perhaps, be focussing your member base. based around a few people who their energy to running the group organise their group's meetings.

larger and more established ones with it. you see today. Their Constitutions a dozen; a un-club may have none. are attracting new people into It's the difference between a disco astronomy and that in itself is a really and a garage party, they're both into cool thing. Some less formal groups music, but one is considered more also operate from stargazerslounge. formal.

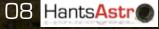
When HantsAstro started, they Star Parties. were approached by the Chairman of a traditional society who was Astronomical worried HantsAstro would be regardless of their setup, are under teaching astronomy the 'wrong' threat. There is so much information way. A committee member of a available on the web, and telescopes different group expressed concern have become a great deal more that HantsAstro would become affordable, that this is one of the few so large they would effectively split hobbies where you don't need to are willing to take on the burden astronomy and create two factions. join a group. IYA 2009 was great for It's true; it really happened and is getting traditional societies to reach quite as ridiculous as it sounds.

make social networking far easier level that it was a year ago, which than it was even five years ago, seems a pity. Astronomy societies and some groups have embraced should not be seen as some type by arbitrary rules. Reward has its Facebook and twitter. Andy Lee's of feudal system either where one 'Astronomy for Everyone' started group has exclusive operating rights over 2 months ago, has over 200 over another in any given area. followers and organises meets in the Guildford area. There is also It should not be seen as competitive than - 'Do You Really Want To Hurt the Salisbury Plain Observing Group is a hobby as well as a science, and is to it! based – you guessed – in Salisbury that does not make it exclusive as well as Worthing Astronomers either, although some societies 'vet' DW

for the benefit of its members. Primarily an astronomy group is

com via their forum and SGL itself uses the forum to promote its own

societies today. out to more people and show them Modern technology has evolved to not been sustained at the same



www.astrosouth.org

Edwardian model. But by the start and Adur. The last two groups their members before they can join. than the mechanics of running a group. Yes, there are administrative groups, much effort has been put organisation, but the most important

Constitutions are guidelines, not providing a service, not just to its During the 1950's and '60s some law. It is a hobby after all! It's you, membership but to the wider of these societies grew into the the sky and a telescope, so get on community, and if it isn't, then perhaps it needs to understand why it exists in the first place. It doesn't may either be a few pages or over All the un-clubs are thriving and matter what kind of group you join or how it is run. You don't even have to join one at all, it is your choice. But, like any hobby or pursuit, it comes down to expanding your personal knowledge and understanding; every group, if it is to survive long term, has to provide a platform for that.

> The biggest issue facing nearly all societies too, is that of volunteers. Without a dedicated team of people helping with the running of any group, less as done as only a few of providing the Group's needs. Eventually, fatigue sets in and the group can suffer. Many hands really what astronomy is about. But it has do make light work, and volunteers should be treated as the lifeblood of a society, and not bound as a some mandatory role, as dictated privileges.

Joining an astronomy group should be more 'Karma Chameleon' the South Coast Astronomy Group where a 'bigger' group means a Me?'....... Just find a group that you which operates in the New Forest; 'better' group. Amateur astronomy like and join in – and that is all there

AstroSouth Cornwall

Interesting local Astronomy talks take place in the South West every month, so please check the relevant web-site for any updates and contact details. Why not pay them a visit and support astronomy on your doorstep!

Cornwall Astronomy Society

www.cornwallas.org.uk info@cornwallas.org.uk

The CAS is a friendly, relaxed group of amateur enthusiasts with interests in many areas of astronomy, cosmology, observing and telescope building.. Meetings are held at the WI Hall in Mabe on the second Tuesday and fourth Thursday of the month at 7.45pm. Please contact info@cornwallas.org.uk for more information

Brannel Astronomy

www.brannelastronomy.com frankjohns@brannelastronomy.com

Formed in 1998 and initially part of the Roseland Observatory, Brannel Astronomy moved its meeting location to Brannel School in St. Stephens. They have an array of telescopes at their disposal and several members have fixed observatories. Meetings, commencing at 7.30pm, are held in the staff room at Brannel School on the 3rd Friday of every month throughout the year and on the 1st Fridays during the winter. Generally 3rd Fridays have a speaker either from within the club or visiting from other clubs, universities, etc. During the summer weekend events are held each month and occasional ad-hoc meetings, such as Meteor Watches are also held.

Callington Community Astronomy Group

www.callington-astro.org.uk enquiries@callington-astro.org.uk

An active group with a lot of experience, CCAG meet at Callington Community College, adjacent to the Sports Hall car park. Opposite the car park are two portable classrooms. The second is the Space Centre where their Astronomy Group meet. They welcome any level of experience, from complete beginner to professional astronomer. Their club nights are usually once a month. Please contact enquiries@callington-astro.org.uk for information of meetings and events etc. or go to their website.

AstroSouth

Nov'10 - Jan 2011

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Norman Lockyer **Observatory & Planetarium** Sidmouth, Devon Various Monthly Visits Shows Check site for details + times and booking Cost - £5 Adults £2.50 under 16s http://projects.exeter.ac.uk/nlo/

Space Odyssey

Home~EN.php

Foxglove Banks, 35 Longmead, Hemyock, Devon, EX15 3SG phone: 0844 335 1353 website: www.spaceodyssey.co.ukemail: info@spaceodyssey.co.uk

Explore@Bristol Planetarium Bristol

Various Monthly Visits Shows Check site for details + times and booking Cost - £11.90 Adults £7.70 under 16s http://www.at-bristol.org.uk/Education/Planetarium.htm

Events

If you have any talks or events you wish to be included in this listing then please get in touch.

AstroSouth Devon

D is for: **Dwarf Planet.** A celestial body orbiting the Sun that is massive enough to be rounded by its own gravity but has not cleared its neighbouring region of planetesimals and is not a satellite. It has to have sufficient mass to overcome rigid body forces and achieve hydrostatic equilibrium. Pluto is considered to be a dwarf planet, as there was a recent re-classification of what a planet is.

Norman Lockyer Observatory Society

www.normanlockyer.org enquiries@normanlockyer.org

A massive site established in 1912 with many domes and lots of history. They hold public events and have their own planetarium! Also into radio astronomy and the site of the annual South West Astronomy Fair (August). For details of all meetings, open days and events please check their website or email enquiries@normanlockyer.org

North Devon Astronomical Society

www.ndastros.org

Information for this group unavailable at time of publication. Please go to their website for details.

Plymouth Astronomical Society

oakmount12@aol.com

This is a medium sized group (about 40 members). Anyone interested in joining the PAS are invited to go along to one of their meetings, which are held at the Glynis Kingham Centre, Alfred St. (off Lockyer St. Behind the Y.W.C.A) on the second Friday of each month, starting at 7:30pm.

Tiverton & Mid Devon Astronomy Society

www.tivas.org.uk nick@tivas.org.uk

Beginning in 1985 this group has become very active with a full observing and lecture programme. Meetings are held in the main hall at Blundell's Prep School (formerly St. Aubyn's School) at 7:30pm, usually on the first schoolterm Friday of the month. No previous knowledge of astronomy is necessary, so if you're at all interested they will give you a warm welcome. Please check their website for directions and contacts.

Please ensure your details and events are up to date! Please e-mail your latest information and Press Releases to: sharon.rose@hantsastro.org



Nov'10 - Jan 2011

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Explore@Bristol **Planetarium** Bristol

Various Monthly Visits Shows Check site for details + times and booking Cost - £11.90 Adults £7.70 under 16s http://www.at-bristol.org.uk/ Education/Planetarium.htm

INTECH Science Centre + Planetarium Winchester, Hants

Located near Winchester, Hampshire, INTECH has a massive 17m tilted dome which makes it one of the largest planetariums in the UK. Launched in 2008, they use the latest digital projection technology to give a truly immersive experience. Featured on international TV and media, the planetarium is a new addition to the INTECH hands-on science centre.

> Dr Jenny Shipway 01926 863791 jennyshipway@intech-uk.com

Events

If you have any talks or events you wish to be included in this listing then please get in touch.

AstroSouth Devon

Interesting local Astronomy talks take place in Devon every month, so please check the relevant web-site for any updates and contact details. Why not pay them a visit and support astronomy on your doorstep!

Torbay Astronomical Society

www.torbayastro.org.uk lizanden@care4free.net TAS@halien.net

They have a full programme of lectures and practical observing, and were founded in 1956. All meetings are held at: Torquay Boys' Grammar School, Shiphay Manor Drive, Torquay TQ2 7EL. One meeting per month (generally on the first Thursday) is primarily an 'observational' event. Their other monthly meeting (generally on the third Thursday) is a 'lecture' event. Lecture meetings have an illustrated talk, informal discussions and observational reports, etc. They welcome non-members.

Bridgend Astronomical Society

www.bridgendastronomicalsociety.co.uk

They have a programme of interesting lectures scheduled throughout the year. Their meeting place for lectures is at PARC SLIP NATURE RESERVE, Aberkenfig, on the 2nd Friday of each month between September and May at 7.30pm. Observation sessions are planned for remaining clear Friday nights. Please go to their website for online form and further details of events.

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Various Monthly Visits Shows Check site for details + times and booking Cost - £5 Adults £2.50 under 16s http://projects.exeter.ac.uk/nlo/ Home~EN.php

Space Odyssey

Foxglove Banks, 35 Longmead, Hemyock, Devon, EX15 3SG phone: 0844 335 1353 website: www.spaceodyssey.co.uk email: info@spaceodyssey.co.uk

Events

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Public Liability Insurance is the minimum cover you should have for your astronomy group but don't you really need more? Depending on what you do as a Group, you may do.

Astro*Sure* covers not just members of the public – we cover your entire group, from committee members to officers and volunteers within your organisation. We can specifically cover telescopes both on-site and at public events. We also offer buildings cover including observatories if required.

Our comprehensive policy includes:

General Liability (Public & Products Liability) **Professional Liability** Management Liability Entity Defence (for Officers of the Group) **Employers Liability (for your volunteers)** Personal Accident **Business Interruption**

And much more.....

This cover has been specially designed for Community Groups that provide a service, be it a charitable or non-charitable status society.

With comprehensive cover starting from just £350 per annum we offer one of the lowest insurance solutions to Astronomy Groups. We tailor the cover to your exact needs. It costs you nothing to find out more. For further details of this policy please visit our website or get in touch with our Community Insurance Specialist - Karen Cowen on 023 9259 5922 or email: karen.cowen@astrosure.com

www.astrosure.com

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Please ensure your details and events are up to date! Please e-mail your latest information and Press Releases to: sharon.rose@hantsastro.org





Limit £1,000,000 Limit £250,000 Limit £250,000 Limit £25,000 Limit £10,000,000 Limit £5,000 Limit £5,000



AstroSouth Dorset

Interesting local Astronomy talks take place in Dorset every month, so please check the relevant web-site for any updates and contact details. Why not pay them a visit and support astronomy on your doorstep!

Wessex Astronomical Society

www.wessex-astro.org.uk jefferis333@btinternet.com

The society meets regularly at 7:30pm on the first Tuesday of the month at The Allendale Community Centre, Hanham Road Wimborne, Dorset BH21 IAS. Visitors or new members of all ages and abilities are very welcome at their regular meetings



Feb-Apr 2010

Planetarium shows and events take place across the South of England. Please check relevant web site for updates and contact details.

INTECH Science Centre + Planetarium Winchester. Hants

Located near Winchester, Hampshire, INTECH has a massive 17m tilted dome which makes it one of the largest planetariums in the UK. Launched in 2008, they use the latest digital projection technology to give a truly immersive experience. Featured on international TV and media, the planetarium is a new addition to the INTECH hands-on science centre.

> Dr Jenny Shipway 01926 863791 jennyshipway@intech-uk.com

Southdowns Planetarium Chichester, West Sussex

Various Monthly Shows Check site for details + times and booking Cost - £6 Adults £4 under 16s www.southdowns.org.uk/sdpt

Space Odyssey

Foxglove Banks, 35 Longmead, Hemyock, Devon, EX15 3SG phone: 0844 335 1353 website: www.spaceodyssey.co.uk email: info@spaceodyssey.co.uk

Events

If you have any talks or events you wish to be included in this listing then please get in touch.

AstroSouth Essex

E is for: Equinox The two points at which the Sun crosses the celestial equator in its yearly path in the sky. The equinoxes occur on or near March 21 and September 22. The equinoxes signal the start of the Spring and Autumn seasons. Star parties at Kelling Heath are based around two of these events. For more info visit www.starparty.org.uk

Clacton & District Astronomical Association

www.clactonastronomy.co.uk pugh-d@sky.com

Interesting web site with a great meeting programme. The CDAA are a small informal group who meet at the 'Friends Meeting House', Granville Road, Clacton-on-Sea at 7.30 p.m. on the first Thursday of each month (except August) In addition to the main events, there are also Monthly presentations. New Members & visitors are always welcome. See their website for more details.

North Essex Astronomical Society

www.neas.me.uk http://twitter.com/northessexastro rogerhumm@btinternet.com

Originally founded in 1980 their monthly meetings are held on the third Wednesday of each month (apart from August and December) doors are open from 19:30hrs for the talk or other activities to start at 20:00hrs. They have their own observatory with a 12" Meade LX200. Public meetings are held at the Henry Dixon Hall, Rivenhall End, Witham, CM8 3HR. For further details please contact Roger Humm (email above).

Castlepoint Astronomy Club

www.cpac.org.uk secretary@cpac.org.uk

They are a very active group and hold weekly club meetings most Wednesdays at 8:00pm at St Michael's Church, St Michael's Road, Daws Heath, Hadleigh, Essex. Please contact their Secretary (email above for details of all meetings and Club events.

Please ensure your details and events are up to date! Please e-mail your latest information and Press Releases to: david.woods@hantsastro.org

AstroSouth

Feb-Apr 2010

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Southend Planetarium

Central Museum, Victoria Avenue. Southend on Sea. Essex SS2 6ES phone: 01702 434449 website: www.southendmuseums.co.uk email: museums@southend.gov. uk

The Obervatory **Science Centre** Herstmonceux, Hailsham

www.the-observatory.org The Observatory Science Centre is located in the former home of the Royal Greenwich Observatory, nestled in and around the domes at Herstmonceux. They have a Mobile Mirror Dome Planetarium the 'Cosmic Classroom'. It is 7m in diameter and 4.5m high and is principally used in their outreach programme to schools. Sandra Voss

01323 832731 outreach@the-observatory.org

Herstmonceux Events 2010 Nov 6 Comets & Curry Nov 13 Open Evening Nov 28 Centre closes on weekdays Dec 4/5 Oben Dec 11 Geminids Open evening Dec 11/12 Christmas Weekend

Events

Interesting local Astronomy talks take place in county of Essex every month, so please check the relevant web-site for any updates and contact details. Why not pay them a visit and support astronomy on your doorstep!

Loughton Astronomical Society

www.las-astro.org.uk las allan-lasweb@yahoo.co.uk

Excellent new website with lots of info. Loughton are heavily involved with Kelling Heath (www.starparty.org.uk). The Loughton Astronomical Society (LAS) meet on Thursday evenings between 8:00 and 10:00 p.m. in the Scout Hall, off Loughton Lane, Theydon Bois, Essex (next to the Cricket Club). If you are serious about astronomy and want to learn then why not go along and see them. New members very welcome.

Thurrock Astronomical Society

www.thurrockastronomy.com thurrockastrosociety@btinternet.com

Started in 1997 by a keen bunch of astronomers, meetings are held on the first Wednesday of every month at 7.30pm, at the Methodist Hall, High Road, Horndon-on-the-Hill, Essex SS17 8LN. Their members range from absolute beginners to experienced astronomers and new members are always welcome. Monthly events include talks. Please go to their website for further details.

Havering Astronomical Society

www.havastro.co.uk

Formed in 1994 and now with over 40 members, their meetings are held on the third Wednesday of the month at Cranham Community Centre, Marlborough Gardens, Cranham, Essex. 7.30 pm. During the course of a year they arrange many activities, such as outings to places of astronomical interest such as Herstmonceux Science Centre and the Jodrell Bank radio telescope facility, and many "star-party" meetings at a dark-sky site in nearby Weald Park, Brentwood. They are heavily into astro imaging. New members are very welcome.

Please see their website for contact details

AstroSouth

Nov'10 - Jan 2011

Planetarium shows and events take place across the South of England. Please check relevant web site for updates and contact details.

The Peter Harrison Planetarium

www.rog.nmm.ac.uk The Peter Harrison Planetarium is based at The Royal Observatory Greenwich, National Maritime Museum in London and has a 116 seat digital planetarium. They offer a wide range of shows for schools and the general public, including the prerecorded shows and live presentations by Royal Observatory Astronomers. It operates the well regarded Digistar 3 system and is the only planetarium in Europe utilising the high resolution E&S laser projection system, providing a vibrant visual experience. Robert Edwards 0208 3126531 bookings@nmm.ac.uk

> The Obervatory **Science Centre** Herstmonceux, Hailsham Admission £7.70/£5.70 Check site for schedule and opening dates www.the-observatory.org/

Events

If you have any talks or events you wish to be included in this listing then please get in touch.

AstroSouth^{org} Hampshire & IOW

Andover Astronomical Society

www.andoverastronomy.org.uk secretary@andoverastronomy.org.uk

Founded in 1995 and have regular meetings from September to March and have a recently revised website. The society meet in the Grateley village hall and hold meetings on the third Thursday of each month from September through to April. They do not currently meet in the summer months.All meetings start at 7:45pm. Please see their website or contact their secretary for more information.

Basingstoke Astronomical Society

www.basingstokeas.org.uk john.stapleton@tesco.net

Formed in 2004, and now with over 50 members, meetings are held on the 4th Thursday of each month at Cliddesden Primary School, Cliddesden, Basingstoke, Hampshire RG25 2QU. Regular talks and observing sessions. Please go along - you will be made very welcome. For further details please contact their Secretary John Stapleton or see their website.

Cody Astronomical Society

www.codyastrosoc.co.uk phil.alner@ntlworld.com

This group is open to members of Qinetiq and DSTL. Limited membership is offered to the public as it's based on a secure site. The society arranges evening club nights/observing sessions during year. These are held at the Cody Observatory at Farnborough. Please check their website for details.

Hampshire Astronomical Group

www.clanfieldobservatory.info carol.bryan@hantsastro.org.uk

The largest amateur observatory complex in the UK, it boasts 6 telescopes in 5 domes. Now entering their 50th year they cover most things astronomical. Activities include: lectures and public open evenings as well as imaging and training. Club night is held at the observatory each Friday night, except for the second Friday of each month when they arrange a public lecture with outside speakers, in the Clanfield Memorial Hall. Please contact Carol Bryan for more details or go to their website.

AstroSouth

Nov'10 - Jan 2011

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Island Planetarium and Dr. Robert Hooke Exhibition

Fort Victoria Country Park, Westhill Lane, Yarmmouth, Isle of Wight, PO41 **0RRA** Evening Astronomy Lectures/ Shows, Stargazing Evenings and Courses. See web site for full details phone:0800 1958295 or 01983 761555 www.islandplanetarium.co.uk email:enquiry@islandastronomy.co.uk

Norman Lockyer **Observatory & Planetarium** Sidmouth. Devon

Various Monthly Visits Shows Check site for details + times and booking Cost - £5 Adults £2.50 under 16s http://projects.exeter.ac.uk/nlo/ Home~EN.php

Events



AstroSouth Hampshire & IOW

H is for: Hubble's Law The law of physics that states that the farther a galaxy is from us, the faster it is moving away from us.

HantsAstro

www.hantsastro.org www.twitter.com/hantsastro david.woods@hantsastro.org membership@hantsastro.org subscribe@hantsastro.org for free e-Zine subscription

They have over 200 members and were formed in 2008. HantsAstro is for anyone who has any interest in Astronomy who wishes to use this as a stepping stone into something more active across Hampshire or beyond. They have observing sites right across Hampshire and a wide range of 10 telescopes. Heavily involved in several public events across the South, they publish the popular LookUp! e-Zine and the AstroSouth Directory. E-mail Dave Woods for more info.

Solent Amateur Astronomers

www.delscope.demon.co.uk society@delscope.demon.co.uk

Founded in 1972 this active group have a broad range of observing and lecture programmes. If you would like to know more about the Society or astronomy, or details of when the observatories are open to the public please contact society@delscope.demon.co.uk or check their website for information on attending events or joining.

Southampton Astronomical Society

www.southampton-astronomical-society.org.uk secretary@southampton-astronomical-society.org.uk

Founded in 1924 – this is one of the oldest groups in the South. They meet on the 2nd Thursday of every month at the Edmund Kell Unitarian Church Hall, Bellvue Road, Southampton at 7.30pm and are always happy to welcome guests and newcomers, so please feel free to turn up or get in touch with them via their website.

AstroSouth

Nov'10 - Jan 2011

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> Dr Jenny Shipway 01926 863791 jennyshipway@intech-uk.com

Norman Lockyer **Observatory & Planetarium** Sidmouth, Devon Various Monthly Visits Shows Check site for details + times and booking Cost - £5 Adults £2.50 under 16s http://projects.exeter.ac.uk/nlo/ Home~EN.php

Events

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AstroSouth Hampshire & IOW

H is also for: Hydrogen An element consisting of one electron and one proton. Hydrogen is the lightest of the elements and is the building block of the universe. Stars form from massive clouds of hydrogen gas.

Isle of Wight

Vectis Astronomical Society

www.wightastronomy.org secretary@vectis-astro.org.uk

There is a new website this year from this large group (150+ members) who have their own bespoke observatory and clubhouse. They are a very active group and are the organisers of the Isle of Wight Star Party. Their meetings are held on the fourth Friday of every month, excluding December, when there is no meeting. Meetings are at the Newport Parish Church Centre (situated on Town Lane, Newport). Please go to their website for more information and directions.





Nov'10 - Jan 2011

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Events



Public **Outreach?**

Meet and Greet is the name of the game.

Words: David Woods Pictures: Graham Green

Astronomy societies in general use the term Public Outreach.

This phrase has come about from large (and sometimes Government) organisations wanting to 'engage' with the general public about a given topic, and as such has been adopted for general use by the astronomy fraternity. Personally, I would like to see the phrase scrapped! IYA 2009 was created to engage more people in astronomy and this includes 'Joe Public'. After this year is up, I hope that many societies will continue to sustain their efforts with the activities they have successfully engaged in so far. But why coin it – Public Outreach

Are we so aloof as a community that we can't just publicise what we do? Are we so inactive that this has to have its own special section in committee meetings? question is – shouldn't everything we do, in terms of observing, imaging, running kind of group, be involved from the tset in recruiting and gathering as much erest as possible? HantsAstro, was eived with this from the outset. It's much part of its DNA, not some on activity. Several recently formed omy groups have also adopted this inte ed stance. One group in particular said - they don't just want 'bums on seats' and agree.

average membership age of an onomy group in the UK about , according to some ecent polls. H Astro has an average ge of 40 years. nis is a double edge will no members though. hile older loubt have experience and the t ngage in such a hobby and contribute to heir group's activities, it is harder because of pressures of career and family life. This is not an ageist remark, as I know some people who are retired, who would like to go back to work just to get some time off!



So – here are my ideas for removing Public Outreach and integrating it into every astronomy group.

and recruit more people, the IYA for this.

to see how many younger members actually bother to join committees. essential to the longevity of any group. technology such as Facebook and Twitter. It's a very passive way of exposing your astronomy group to Public Outreach is a brilliant more people.

regularly and run workshops for people so they can share their knowledge of astrophotography too.

events and exhibitions, almost as a promotion team. people (who hopefully are creative) put together a stand, graphics and group more appealing.

All of this requires planning, which is magazines and video. probably why I hate committees as it takes a dozen people to decide if a The important thing to remember hole needs to be filled in a road. In the is that as soon as you introduce a

meantime, many people have already fallen into it. Every society, once it grows, slows down due to bureaucracy and politics. Breaking things down I. If you are based at a site, go out into smaller teams helps to alleviate this. In HantsAstro again, for example, Moonwatch is an excellent vehicle there is no committee but a group of CoreTeam Members who generally 2. Membership Secretaries should decide what needs to be done. The also be counting the average age of risk is though, like any group, that it their group. It would be interesting will always be the same core people who carry out the work. A few groups have recently tried to encourage their This is important as new blood is members to 'volunteer' their services, but I have always maintained it is better **3.** To attract younger members, use to grow volunteers from within the ranks than to press-gang them.

opportunity to raise revenue for your 4. Update your website, use email own group, and to provide a service to the community. It is without exception that every group provides a **computers.** This includes imaging and service, otherwise why would people join? Publicity managers/officers or 5. This now comes full circle. Create business managers, as I so shockingly a team of people that attends discovered once, is perhaps a little extreme. HantsAstro was developed **Make these** to show that by working in partnership group with free membership. Elements materials that make joining your of this can be adopted by pretty much any group. Although we are unique in being able to produce our own

commercial element into any group it can become a nightmare. It effectively becomes 'unpaid' work - people have to have the desire to help out, it should never become mandatory. When I was Secretary on a committee a few years ago, my opening address was 'Every hobby costs' and nowadays with the ambitions of many groups, membership revenue is not enough just to cover costs. Grant revenue, due to the recession, is also very thin on the ground. So we all have to look at other ways of generating income to cover costs and to maintain and develop our own astronomy groups.

I would love to hear from any astronomy group who agrees or disagrees with what I have written here. Because astronomy in the UK has virtually no real voice publicly, and that is what AstroSouth and Look Up! are all about. It's mingling astronomers and astronomy groups together. So write in and let me have your views.

Would ET visiting earth call that 'Public Outreach'? That's my point. We should with other businesses you could run a not be so far above our audience in order to make out we have to do something special to communicate with them.

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DW
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2010-11 - Events in the South of England

One of the largest star parties in Europe -The Kelling Heath Spring Equinox 31Mar - 04 April 2011. http://www.starparty.org.uk



One of the great things about the We have been to most of these International Year of Astronomy (IYA 2009) is the growing popularity of Star Party events being held around the country. The question that often arises on most Forums is, how does one go about getting one started? HantsAstro has a growing reputation for organising and taking South of England.

more events are springing up across the UK and there has never been a better time to get into astronomy. com

events and they are a real asset to the world of amateur astronomy.

2011 - INTECH StarGazing **Event** Formerly known as the Telescope Amnesty is now entering its third year and is held at one of part in various events across the the most advanced planetariums in the UK.

During the year INTECH hold a for details. http://www.hantasastro. Over the past few years, more and series of lectures on astronomy which is well worth checking out on their website. http://www.intech-uk.

MoonFest by HantsAstro

As part of their DNA, IYA2009 kick started these free public events across Hampshire and will be 10 November 2010 & 26 Jan running Oct 2010 - May 2011, and then starting again as from October 2011 to the following year. Over 300 people visit each of these events sponsored by Astronomia of

Dorking and Vixen Telescopes. Please visit HantsAstro's website org/moonfest

2010 04-05 February AstroFest, London

Run by Astronomy Now magazine, this London based 2 day event kicks off with some world-class seminars. Trade stands and talks create a very busy event.

http://www.astronomynow.com/ astrofest/

Guildford Society, Surrey

Due to the overwhelming success of their free public events at Newlands Corner, Guildford, Surrey - Guildford AS will be holding more of these observing sessions throughout 2010-11. Please visit their website. http:// www.guildfordas.org.uk

03-07 March 2010 - Isle of Wight Star Party

This event is a real treat with some of the darkest skies in the South. At the Brighstone Holiday Centre you can either rough it in a tent or benefit from the creature comforts of a warm chalet. With lots of talks and things to do, it's one of the highlights of the astronomy calendar. http://www.iowstarparty.org www.twitter.com/iowstarparty

31 Mar- 04 Apr 2010 -Kelling Heath Equinox

One of the first big star parties of the year. Main weekend 3-4 April http://www.starparty.org.uk

(May onwards) Summer 2011 - Royal Observatory Greenwich

This is effectively the centre for astronomy during the summer with lots of events, and with their new planetarium there (part of a £17.7m development) will also be some amazing shows on offer. http://www.nmm.ac.uk/places/ royal-observatory/

TBA August 2011 – Norman Lockyer Observatory

Every year they run the **South West** Astronomy Fair with some very eminent speakers, a planetarium show, trade stalls and many activities on site. It also gives you the chance to wander around their large site imbibing the history and technology Astronomical dating back over 130 years. http:// www.normanlockyer.org/

> TBA- August 2011 Salisbury Star Party 2009 was a breakthrough year for this new star party. It has been taken over and will be run by StarGazers Lounge. Please visit their forum for more details. http:// www.stargazerslounge.com

02-04 2011 Sept Herstmonceux Astronomy Festival, Hailsham

3 days of talks and all things astronomical from a splendid science centre, with some big telescopes.

http://www.the-observatory.org

19-30 Sept 2011 Kelling Heath Autumn Equinox

These gatherings in September are often quoted as the largest **Spring** star parties in Europe. They are predominantly run and organised by Loughton and Norwich Astronomical Societies. With over 1000 astronomers pouring in from all over Europe, your reservation has to be booked well in advance. For further details go to their website. http://www.starparty.org.uk

> This list is not exhaustive and is just a preview of some of the events to come in 2011. If you are a society or event organiser and wish to add your events to this list – then please email me

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AstroSouth Education

An Astronomy course is a great way to learn about the history of this science and the night sky. Some run practical workshops as well as offering you the chance of gaining a qualification. Check them out on-line or get in touch with your local Further Education Centre.

We have listed some contacts for you below...

The following qualification courses are ideal for amateur astronomers and are by part-time study only and are ideal for disitance learning.

BIRKBECK COLLEGE, UNIVERSITY OF LONDON (School of Earth Sciences) Certificate in Planetary Geology (two-year course by class attendance): www.bbk.ac.uk/es

LIVERPOOL JOHN MOORES UNIVERSITY (Astrophysics Research Institute) Programme of courses in astronomy by distance learning: www.astro.livjm.ac.uk/distance

THE OPEN UNIVERSITY (Department of Physics and Astronomy) Certificate in Astronomy and Planetary Science (by distance learning): http://physics.open.ac.uk

UNIVERSITY COLLEGE LONDON (Department of Physics and Astronomy) Diploma in Astronomy (two-year course by class attendance): www.phys.ucl.ac.uk/diploma

UNIVERSITY OF CENTRAL LANCASHIRE Bsc (Hons.) degree in Astronomy (by distance learning): www.StudyAstronomy.com

UNIVERSITY OF MANCHESTER - JODRELL BANK OBSERVATORY Programme of courses in astronomy by distance learning: www.manchester. ac.uk/jodrellbank/distance

For schools and colleges in your locality that do GCSE or introductory astronomy courses, one of the easiest things to do is to search the web site www.hotcourse.com which lists all the courses in your area, and have over 1.000.000 courses available to choose from.

Please ensure your details and events are up to date! Please e-mail your latest information and Press Releases to: sharon.rose@hantsastro.org

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Reader's Images

The Whirlpool Galaxy M51 - lain Melville

Location: Home Observatory in Rickmansworth UK. http://www.mrmelville.co.uk



Distance: 31 Million light years Visual Size: 11 x 7 arcmin2



Constellation: Canes Venatici Actual Size: 65,000 light years across Magnitude: 8.4 Other Designations: NGC5194 & NGC5195

AstroŞouth Kent

Interesting local Astronomy talks in Kent take place in the South every month, so please check the relevant web-site for any updates and contact details. Why not pay them a visit and support astronomy on your doorstep!

Ashford Astronomical Society www.ashfordastro.org.uk jacethebace@gmail.com

Recently updated website and organisers of the 'astrobash'. If you would like more information on the society, meetings, locations or any other aspect of what they do, please feel free to contact their Secretary - Jason directly (details below).

Jason Hall (Secretary) - 01233 637557 The AAS meet on the last Friday of each month at Woodchurch Memorial Hall, The Green Front Road, Woodchurch. Ashford , TN26 3QB. Ashford Astronomy Club is open to all age groups, backgrounds and levels of experience. Children under the age of 16 are more than welcome, if accompanied by a parent or guardian.

Cranbrook & District Science & Astronomy Society www.cadsas.com kevin.brown@cadsas.com mail@cadsas.com

This fast-growing Science and Astronomy Society meet regularly at Cranbrook School, in Cranbrook, Kent. To find out about joining or anything else – please mail them at mail@cadsas.com or check their website for more details.

Crayford Manor House Astronomical Society www.crayfordmanorastro.com mike@mrushton.demon.co.uk

Active with workshops and meetings, they also offer a mentoring scheme. Meetings are held at The Manor House, Mayplace Road East, Crayford, Kent, DA1 4HB Tel: 01322 521463

Join today - see their website for more details.

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The Obervatory **Science Centre** Herstmonceux, Hailsham www.the-observatory.org

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It is 7m in diameter and 4.5m high and is principally used in their outreach programme to schools. Sandra Voss 01323 832731 outreach@the-observatory.org

Herstmonceux Events 2010 Nov 6 Comets & Curry Nov 13 Open Evening Nov 28 Centre closes on weekdays Dec 4/5 Open Dec 11 Geminids Open evening Dec 11/12 Christmas Weekend

Events

If you have any talks or events you wish to be included in this listing then please get in touch.

AstroSouth Kent

South East Kent Astronomical Society www.sekas.co.uk secretary@sekas.co.uk

With over 150 members this large society was formed in 1972 and has a full programme of observing sessions and talks. Public observing nights are also a frequent activity of this group with a programme of evenings specifically for night-time observing. The best way to start is to attend a SEKAS meeting. Check their website for directions to new main venue - Bridge Village Hall. Alternatively contact one of the following people.

Alan Buckman (Chairman) 01304 367711 Tony Bennett (Secretary) 01843 831079 Alan Snook (Treasurer) 01304 841694

Orpington Astronomical Society www.orpington-astronomy.org.uk

This society is located to the south east of London, England. Regular talks and meetings and open days are held. They meet every month, usually on the third Thursday 7.30pm to 10.00pm. Please check their website for venue details.

Mid Kent Astronomical Society www.midkentastro.org.uk pwparish54@yahoo.co.uk

With one of the best astronomy websites, this group started in 1977 and has a 14" telescope housed in it's own observatory. Activities include observing sessions and regular meetings, which are held at Bredhurst Village hall and start at 7:45pm (unless otherwise noted) on the second and last Friday of the month. Their observing sessions are held at their observatory in Canterbury. Please check their website for details.

Mid Kent A.S Meeting Programme 2010 (All Meetings in Bredhurst Village Hall unless stated otherwise)

Greg Smye Rumsby :- Title to be advi
Peter Parish :- Constellation of the me
Christmas Meeting
No Meeting

Please ensure your details and events are up to date! Please e-mail your latest information and Press Releases to: sharon.rose@hantsastro.org



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AstroSouth

Nov'10 - Jan 2011

Planetarium shows and events take place across the South of England. Please check relevant web site for updates and contact details.

The Peter Harrison Planetarium

www.rog.nmm.ac.uk

The Peter Harrison Planetarium is based at The Royal Observatory Greenwich, National Maritime Museum in London and has a 116 seat digital planetarium. They offer a wide range of shows for schools and the general public, including the prerecorded shows and live presentations by Royal Observatory Astronomers. It operates the well regarded Digistar 3 system and is the only planetarium in Europe utilising the high resolution E&S laser projection system, providing a vibrant visual experience.

Robert Edwards 0208 3126531 bookings@nmm.ac.uk

UCL Astronomy Lectures

www.ucl.ac.uk/themindoftheuniverse Located in the University College London, they hold public/school lectures and teacher workshops/ resources embracing topics like Origin and development of the Universe, the mystery behind the nature of the dark universe, the formation of stars and planets, space exploration and the possibility of alien life. The project has a robust team of science advisors and strong links to UK educational organizations like the British Science Association, Institute of Physics, the Royal Institution, the Royal Astronomical Society and the Association for Science Education.

HantsAstr

Francisco Diego 0207 6792000 fd@star.ucl.ac.uk

AstroSouth London

There are a number of astronomical groups around the London Area. Don't let the light pollution deter you from getting involved in astronomy. These groups have a wealth of experience of getting views of the night sky and many hold talks and seminars. Light pollution filters are one way of combating urban sky-glow for astrophotography.

West of London Astronomical Society

www.wolas.org.uk duncan.radbourne@gmail.com

Founded in 1967 WOLAS now has over 170 members with a broad spectrum of observers. Monthly meetings are held in Uxbridge and North Harrow. If you have any questions about the society, or would like an information pack/membership form please contact their publicity officer: Duncan Radbourne on the above email address.

Flamsteed Astronomy Society

www.flamsteed.info http://twitter.com/Flamsteed enquiry@flamsteed.info

The Flamsteed is an amateur astronomy society based at the Royal Observatory and National Maritime Museum in Greenwich, London SEI0. It is named after the first Astronomer Royal, John Flamsteed. If you would like to join the Society, which now has over 200 members, you can let us know by completing the online form on the website or you can telephone the Membership Office of the National Maritime Museum during working hours on 020 8312 6678

Astronomical Society of Haringey

www.ashastro.org.uk secretary@ashastro.org.uk

Started in 1972, this group hold regular monthly lecture meetings with speakers both from the ranks of their membership and from outside. They currently meet at Ashmole School in Southgate, NI4, where they will be helping with their astronomical and scientific outreach programs. Their meetings are generally held on the third Thursday of each month. Doors open at 7.30pm.

Please check their website for details of how to get to Ashmole School and other information.

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> Francisco Diego 0207 6792000 fd@star.ucl.ac.uk

AstroSouth Oxfordshire

O is for: **Occultation** An event that occurs when one celestial body conceals or obscures another. For example, a solar eclipse is an occultation of the Sun by the Moon.

Abingdon Astronomical Society

www.abingdonastro.org.uk chris.c.holt@ntlworld.com

Formed in 1979 this group offers a full programme of meetings with talks, beginners' meetings and observing sessions. AAS main meetings are at All Saints' Methodist Church Hall, Dorchester Crescent, Abingdon on the second Monday of each month from September to June, at 8.00pm. Beginners' meetings are at the same venue anf time on another Monday in the month. Observing sessions are held in Abingdon or at darker sky sites in the area. Please check their website for a detailed directions and other information. Newcomers are very welcome.

Chipping Norton Astronomical Society

www.cnaag.com robin@chippingnortontheatre.com

Observing takes place whenever commitments and the weather allow and we have the choice of several exclusive observing sites including areas close to the magical Rollright Stones, a unique privilege for the group. There is no requirement to have any astronomical knowledge, equipment or experience (but if you have bring it along), all you need to bring is your interest and enthusiasm. Whatever your level of interest, please get in touch. Contact details on the website.

> Acrobat Tip: You can click on any weblink within the AstroSouth Directory to take you to that site

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0208 3126531 bookings@nmm.ac.uk

Mizar Travelling Planetarium

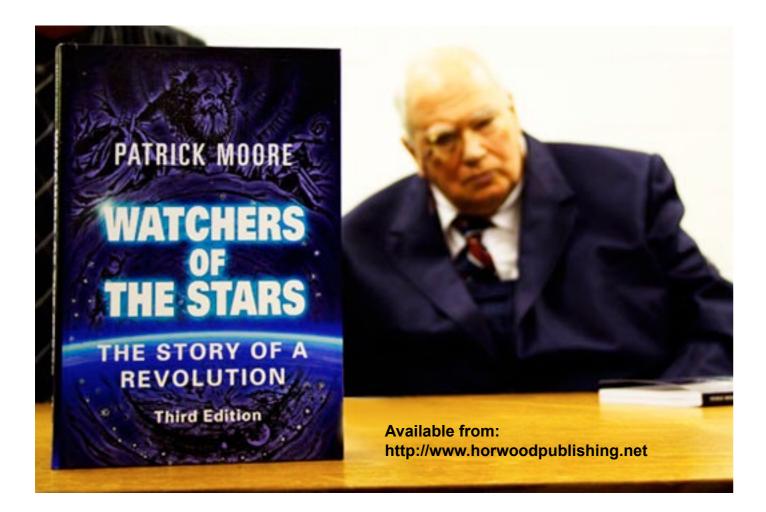
www.mizar-astro.freeserve.co.uk The Mizar Planetarium, operated by Bob Mizon F.R.A.S., travels from Wimborne, Dorset, UK, and takes the night sky to schools, youth groups, Scouts, Guides, Brownies, Cubs, societies, clubs, public events and exhibitions, etc. within a radius of approximately 250 km (150 miles). The Planetarium can accommodate up to 35 people. in the 6-metre-wide (20 foot) dome. A quiet, indoor space with a minimum ceiling height of 3.2 metres (approx 10 foot 6 inches) is needed. Disabled access is no problem. Bob Mizon 01202 887 084 bob@mizarastro.freeserve.co.uk

www.astrosouth.org



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www.astronomia.co.uk

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AstroSouth

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Eligibility criteria and conditions apply. See our website for full details.

AstroSouth Somerset

Interesting local Astronomy talks take place in Somerset every month, so please check the relevant web-site for any updates and contact details. Why not pay them a visit and support astronomy on your doorstep!

Beckington Astronomical Society

www.basnet.org.uk ronw@qubit.myzen.co.uk

Formed in 1999 this 10 year old group have a varied programme of Meetings and Events. They also run a basic astronomy course. BAS Meetings are held on the 3rd Friday of each month at 7.30pm at the Beckington Baptist Church Hall, please see their website for further details.

Crewkerne & District Astronomical Society

www.cadas.net intrasites@ukonline.co.uk

Formed in 2002 and now with over 40 members they are currently trying to establish an observatory. Meetings are held on the third Wednesday of every month starting at 7.30 pm at St Bartholomew's Church Hall in Crewkerne and are open to all. Please check their website for more details.

South Somerset Astronomical Society

http://ssas.fateback.com/home.htm jrbrimble@btinternet.com

Regular meetings between September and May, they also have observing sessions and visit places of astronomical interest. Venue: Queen's College, Physics Lab Taunton. Formal meetings are on the second Tuesday of the months between September to May. Time: 7:30pm. For more information please contact their Secretary - John Brimble on 01823 413224 or at the above email address.

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Nov'10 - Jan 2011

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Hershel Museum of Astronomy

Various Monthly Shows Check site for details + times and booking http://www.bath-preservation-trust. org.uk/index.php?id=8

Explore@Bristol Planetarium Bristol

Various Monthly Visits Shows Check site for details + times and booking Cost - £11.90 Adults £7.70 under 16s http://www.at-bristol.org.uk/Education/Planetarium.htm

Mizar Travelling Planetarium Wimborne, Dorset

The inflatable dome holds up to 35 and can be tailored to suit individual requirements.

> phone: 01202 887 084 www.mizar-astro.freeserve.co.uk

Events

If you have any talks or events you wish to be included in this listing then please get in touch.

AstroSouth Somerset

S is for: Steady State Theory. This theory suggests the universe is expanding but exists in a constant, unchanging state in the large scale, and states that new matter is being continually being created to fill the gaps left by expansion. This theory has been abandoned by most astronomers in favour of the Big Bang Theory.

Bridgwater Astronomical Society

www.bwastrosoc.org.uk bwastrosoc@hotmail.com

Established in 1969 the BAS meet every 2ndWed in the month, from Sept until June, in room D10 at Bridgwater College, Bath Road, Bridgwater. They hold regular monthly meetings and guizzes. Please check their website for more details or contact them on the above email.



AstroSouth

Nov'10 - Jan 2011

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Hershel Museum of Astronomy

Various Monthly Shows Check site for details + times and booking http://www.bath-preservation-trust. org.uk/index.php?id=8

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Various Monthly Visits Shows Check site for details + times and booking Cost - £11.90 Adults £7.70 under 16s http://www.at-bristol.org.uk/Education/Planetarium.htm

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Events



AstroSouth Surrey

Interesting local Astronomy talks take place in Surrey every month, so please check the relevant web-site for any updates and contact details. Why not pay them a visit and support astronomy on your doorstep!

Croydon Astronomical Society

www.croydonastro.org.uk http://twitter.com/CroydonAS chairman07@croydonastro.org.uk

Croydon Astronomical Society was formed in 1953 .Lectures are held on alternate Fridays (check the website for more details) from 7:45 pm to about 10:00 p.m. in the Lecture Theatre of the Royal Russell School, Coombe Lane, Croydon, Surrey. The Lecture Theatre is located on the lower ground floor of the Great Hall, which can be identified by the floodlit belfry. The entrance is on the opposite side of the building to the car park at the far end. There is a large car park on the left shortly after you drive in the gates.

Ewell Astronomical Society

www.ewell-as.co.uk mgavin@ntlworld.com

EAS meetings are held at Nonsuch HS for Girls, Ewell Road, Cheam, Surrey on the second Friday of each month at 7.40pm. All are welcome to their spacious ground floor meeting room for coffee & biscuits, popular speakers, plus social events. See their website for contact details etc.

Farnham Astronomical Society

www.farnham-as.co.uk

astro dt@yahoo.co.uk

Farnham AS are a friendly and informal society, with a membership spanning a wide range of ages and experience. Visitors and new members are always welcome. Their meetings are held on the second Tuesday of every month at: Willis Hall, Sandy Lane, Church Crookham, Fleet, Hampshire GU52 8LD. The venue opens 7.30pm for a 7.45 start. Please check their website for further details or contact their secretary Danny Thomas on the above email.

AstroSouth

Nov'10 - Jan 2011

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INTECH Science Centre + Planetarium Winchester, Hants Cost £2 per show in addition to exhibition entry Cost - £6.95 Adults

£4.65 under 14 Check site for schedule www.intech-uk.com

Events

If you have any talks or events you wish to be included in this listing then please get in touch.



S is for: **Sunspot.** Areas of the Sun's surface that are cooler than surrounding areas. They usually appear black or darker than the surrounding area on visible light photographs of the Sun. Sunspots are also usually associated with disturbances in the Sun's electromagnetic field.

Guildford Astronomical Society

www.guildfordas.org http://twitter.com/GuildfordAS johnaxtell42@aol.com

Do you have an interest in Astronomy already and want to meet likeminded

people? Then why not go along to one of their meetings or public observing evenings. Everyone is welcome - from absolute beginners to experienced observers. Their meetings are held in the Guildford Institute, Ward Street, Guildford, GUI 4LH, Meetings start at 7.30pm on the first Thursday of each month, (except August when there is no meeting). Meetings usually finish around 10pm. Please check their website for more information.

Guildford Astronomy Society

- Talks/Meetings

4 Nov 2010 Sizing the Universe - Kevin Pretorius 2 Dec 2010 Dark Energy - Prof Bob Nichol, University of Portsmouth 6 Jan 2011 The Solar System - James Fradgley



AstroSouth

Nov'10 - Jan 2011

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The Obervatory **Science Centre** Herstmonceux, Hailsham

www.the-observatory.org The Observatory Science Centre is located in the former home of the Royal Greenwich Observatory, nestled in and around the domes at Herstmonceux. They have a Mobile Mirror Dome Planetarium the 'Cosmic Classroom'. It is 7m in diameter and 4.5m high and

is principally used in their outreach programme to schools. Sandra Voss 01323 832731 outreach@the-observatory.org

Herstmonceux Events 2010 Nov 6 Comets & Curry Nov 13 Open Evening Nov 28 Centre closes on weekdays Dec 4/5 Open Dec 11 Geminids Open evening Dec 11/12 Christmas Weekend

Events



AstroSouth Sussex

Interesting local Astronomy talks take place in Sussex every month, so please check the relevant web-site for any updates and contact details. Why not pay them a visit and support astronomy on your doorstep!

East Sussex

Crawley Astronomical Society

www.crawleyas.co.uk jimswift@talktalk.net

This group has been going for over 30 years and has regular meetings and a news letter. The Society meets on the 3rd Friday of the month (except July and August) at Ifield Community Centre, Ifield Drive, Crawley, West Sussex RHII OBT at 7.30pm. Please check their website for further details or contact their Secretary Jim Swift .Tel 01293 882560

Eastbourne Astronomical Society

www.eastbourneas.org.uk bobwcripps@btinternet.com

Founded in 1960 the society now has over 100 members and has an established programme of events including lectures and observing. Monthly meetings are held from September/October to July at Willingdon Memorial Hall, Church Street, Willingdon, BN20 9HT. Please check their website for dates and further information or contact their membership secretary Bob Cripps on the above email.

Lewes Astronomers

http://sites.google.com/site/lewisastronomers/ alice.smol@tesco.net

Meetings are held with a guest speaker on the first Wednesday of each month at 8pm (excepting January, July & August) and also have practical observing evenings when weather permits. Non-members £3.00. Meetings in 2009 will be at 7.30pm in The Town Hall Lecture Room, Lewis. Please contact Alice Smole by email for all further details.

AstroSouth

Nov'10 - Jan 2011

Planetarium shows and events take place across the South of England. Please check relevant web site for updates and contact details.

> The Obervatory **Science Centre** Herstmonceux. Hailsham Admission £7.70/£5.70 Check site for schedule and opening dates www.the-observatory.org/

The Peter Harrison Planetarium www.rog.nmm.ac.uk

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Events

If you have any talks or events you wish to be included in this listing then please get in touch.



S is for : Supernova A supernova is a cataclysmic explosion caused when a star exhausts its fuel and ends its life. Supernovae are the most powerful forces in the universe. All of the heavy elements were created in supernova explosions.

Wealden Astronomical Society www.wealdenas.co.uk info@wealdenas.co.uk

Formed in 2006 this small club is heavily involved with Herstmonceux Observatory and Science Centre. They also have a 12" Dobsonian and have regular meetings and observing sessions. They work in collaboration with the Observatory Science Centre, and hence can boast the most fantastic setting for their regular bi-monthly meetings; usually Dome B at the Observatory Science Centre Herstmonceux. Along with meetings they arrange viewing evenings from October to April as often as is possible. Please contact - info@wealdenas.co.uk for more details or check their website.

East Sussex Astronomical Society

www.esas.org.uk david@esas.org.uk

This established group boasts meetings and observing sessions at St Mary's School and College, Bexhill-on-Sea. They meet on the first Thursday of each Month (excluding August - see below) at 8:00 - 10:00 pm. Please check their website for more details.

Wadhurst & Ticehurst Astronomical Society http://wadhurst.info/was/

Meetings are held on the third Wednesday of the month in the Upper Room of the Methodist Church, Lower High Street, Wadhurst. Please see their website for further details.



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AstroSouth Sussex

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West Sussex

Adur Astronomical Society

http://www.adur-astronomical.com/ robin-durant@btconnect.com

Formed in 2008 this group focuses on astro photography, they meet at the Southwick Community Centre, Southwick, West Sussex BN42 4TE, on the first Monday of every month at 7.30pm.

Foredown Tower Astronomers

http://fta.exofire.net/

From February 2010 we will be meeting at our new temporary venue of Emmaus, Drove Road, Portslade, Brighton BN41 2PA. The first meeting at Emmaus will be on Thursday February 18th at 7.00 for 7.30pm. All meetings thereafter will be on the third Thursday of each month from 7.30pm to 9.30pm, for talks and also observing (if the sky is clear). Please go to our website for full meeting details, directions and all contact information.

Horsham Astronomical Society

www.horshamastronomy.com secretary@horshamastronomy.co.uk

Please contact their secretary Richard Griffith at the above email address for further information or visit their website.

Brighton & Hove Astronomical Society

http://homepage.ntlworld.com/john wade/bhas/

One of the oldest groups in the Brighton area, this small group occasionally meets for observing and lectures. For further information about the Club please contact one of the following trustees after 7.00pm: John Bush 01273 884461, Eric Gibson 01892 852639 or John Wade 01273 889112 or check their website.

AstroSouth

Nov'10 - Jan 2011

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outreach@the-observatory.org

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Events

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AstroSouth **S**ussex

S is also for: Synchronous Rotation. A period of rotation of a satellite about its axis that is the same as the period of its orbit around its primary. This causes the satellite to always keep the same face to the primary. Our Moon is in synchronous rotation around the Earth as are the 26 GPS satellites above us. which (hopefully) stop us from gettting lost in Worthing!

Worthing Astronomical Society

www.worthing-astronomical-society.com

We meet at 1930-2200hrs on the 3rd Monday of each month, except August at: Emmanuel United Reformed Church Hall, St Michaels Road, off Heene Road, Worthing, West Sussex, BN11 4SD. Please see our website for full details of meetings, membership etc.. and contact details.

Worthing Astronomical Society Talks/Events 2010

15th November 2010	The Father of Modern Space Art: The Art of Chesley Bonestell & Destinat Bob Seaney (Wadhurst Astronomical So
20th December 2010	Members' Christmas Social Evening
17th January 2011	Highlights of the Apollo Program Rob Cray (Wadhurst Astronomical Socie

South Downs Astronomical Society

www.southdownsas.org.uk meteoritemark@googlemail.com

South Downs Astronomical Society are also tied in with the Planetarium at Chichester. It boasts regular talks and observing sessions. Main Meetings are held in the Lower Main Hall of the Chichester High School for Boys starting at 7.30pm and are on the first Friday of each month. Please contact Mark Ford - meteoritemark@googlemail.com for further details.

Worthing Astronomers

www.worthingastronomers.org.uk info@worthingastronomers.org.uk

Worthing Astronomers were formed in 2008 and now have over 55 members, with regular meetings and a newsletter. Like HantsAstro, it's based primarily on-line. and with free membership Please see their website for contact and meeting details.

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AstroSouth

Nov'10 - Jan 2011

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INTECH Science Centre + Planetarium

Winchester, Hants Located near Winchester, Hampshire, INTECH has a massive 17m tilted dome which makes it one of the largest planetariums in the UK. Launched in 2008, they use the latest digital projection technology to give a truly immersive experience. Featured on international TV and media, the planetarium is a new addition to the INTECH hands-on science centre.

> Dr Jenny Shipway 01926 863791 jennyshipway@intech-uk.com

Events



AstroSouth Wiltshire

W is for: White Dwarf A very small, white star formed when an average sized star uses up its fuel supply and collapses. This process often produces a planetary nebula, with the white dwarf star at its center, which is very dense in terms of mass. Sirius B is an example of a White Dwarf.

Wiltshire Astronomical Society

http://wasnet.co.uk/ anglesburns@hotmail.com

Founded in 1995 they have several locations across Wiltshire and produce an excellent news letter plus a full speaker programme and observing sessions. WAS meetings are held at the Pavilion Hall in the village of Seend near Melksham. They meet every month from September to June; usually from 8pm. Talks are given by guest speakers on a wide variety of topics. Newcomers and visitors are always very welcome. Please check their website for directions and details of their meetings and contacts.

Swindon Stargazers

www.swindonstargazers.com michaelj.partridge@hotmail.co.uk

This new group started in February 2009 and has an active group of astronomers with monthly meetings and talks. Please check their website for further details and contacts.

AstroSouth

Nov'10 - Jan 2011

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Explore@Bristol **Planetarium** Bristol

Various Monthly Visits Shows Check site for details + times and booking Cost - £11.90 Adults £7.70 under 16s http://www.at-bristol.org.uk/Education/Planetarium.htm

Norman Lockyer **Observatory & Planetarium** Sidmouth, Devon Various Monthly Visits Shows Check site for details + times and booking

Cost - £5 Adults £2.50 under 16s http://projects.exeter.ac.uk/nlo/ Home~EN.php

Space Odyssey

Foxglove Banks, 35 Longmead, Hemyock, Devon, EX15 3SG phone: 0844 335 1353 website: www.spaceodyssey.co.uk email: info@spaceodyssey.co.uk

Events

If you have any talks or events you wish to be included in this listing then please get in touch.

AstroSouth **Channel Islands**

Interesting local Astronomy talks take place in the South every month, so please check the relevant web-site for any updates and contact details. Why not pay them a visit and support astronomy on your doorstep!

Guernsey Astronomical Society

www.astronomy.org.gg

This group holds regular lectures and has it's own observatory, meetings are held every Tuesday please see their website for contact and observing details.

Jersey Astronomy Club

www.jerseyastronomyclub.org.je

Please check their website for contact details.

Acrobat Tip: You can click on any weblink within the AstroSouth Directory to take you to that site

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Nov'10 - Jan 2011

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If you have any talks or events you wish to be included in this listing then please get in touch.

Events



AstroSouth[®] Bristol

B is for: Black Hole The collapsed core of a massive star. Stars that are very massive will collapse under their own gravity when their fuel is exhausted. The collapse continues until all matter is crushed out of existence into what is known as a singularity. The gravitational pull is so strong that not even light can escape, unlike Bristol's shopping centres.

Bristol Astronomical Society

www.bristolastrosoc.org.uk secretary@bristolastrosoc.org.uk

BAS was formed in December 1942 making it one of the oldest groups in the South and the society's observatory boasts a 12" Newtonian reflector. It has moved with the times with it's own forum and active programme of observing and events. Meetings are held at Bristol Grammar School, University Road, Bristol on Friday evenings at 7.15pm. Please check their website for details of events and observing sessions or contact their secretary (email above).

AstroSouth

Nov'10 - Jan 2011

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Explore@Bristol Planetarium Bristol

Various Monthly Visits Shows Check site for details + times and booking Cost - £11.90 Adults £7.70 under 16s http://www.at-bristol.org.uk/Education/Planetarium.htm

Explorer Dome

Mailbox 42, 14 Clifton Down Road, Bristol BS8 4BFA mobile planetarium. Geared to the National Curriculum from KS1 to A-level. Topics include Space, Light, Forces and inside the Body. Explorer Dome is very well known and travels throughout the South West of England & Wales and beyond...phone:0117 914 1526 website: www.explorerdomeco.uk email: information@explorerdome. co.uk

Events

If you have any talks or events you wish to be included in this listing then please get in touch.



Interesting local Astronomy talks take place in Bedfordshire every month, so please check the relevant web-site for any updates and contact details. Why not pay them a visit and support astronomy on your doorstep!

Cranfield Astronomical Society

www.societies.cranfield.ac.uk/astro k.sehdev@cranfield.ac.uk

Based in Cranfield University, this group boasts it's own observatory, an astronomy course and a regular programme of speakers. Please see their website for more details or contact Kamal Sahdev on the email address above.

Bedford Astronomical Society www.bedastro.org.uk chairman@bedfordastro.org.uk

Formed in 1987 this group has it's own observatory and a regular series of observing sessions and meetings and has now grown to approximately 100 members. They meet regularly on the last Wednesday of each month at Bedford School, either in the Resource Room, or in the Science Lab in the school. Rooms open at 7:30pm and talks start at 8:00 sharp. Please see their website for further details and contacts.

Luton Astronomical Society

www.lutonastrosoc.org.uk user998491@aol.com

Luton was formed in 1969 and runs events from it's observatory and also has an active programme of speakers. Their regular monthly meetings will take place on the last Thursday of the month, from 7.30 p.m. until 9.00 pm at Putteridgebury, except June, July and August when they are at Someries school Wigmore Lane. Please see their website for details or contact their secretary Geoff Mitchel on the above email address.

Please ensure your details and events are up to date! Please e-mail your latest information and Press Releases to: sharon.rose@hantsastro.org

AstroSouth"

Nov'10 - Jan 2011

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The Peter Harrison Planetarium

www.rog.nmm.ac.uk The Peter Harrison Planetarium is based at The Royal Observatory Greenwich. National Maritime Museum in London and has a 116 seat digital planetarium. They offer a wide range of shows for schools and the general public, including the prerecorded shows and live presentations by Royal Observatory Astronomers. It operates the well regarded Digistar 3 system and is the only planetarium in Europe utilising the high resolution E&S laser projection system, providing a vibrant visual experience.

Robert Edwards 0208 3126531 bookings@nmm.ac.uk

Events

If you have any talks or events you wish to be included in this listing then please get in touch.

AstroSouth **Buckinghamshire**

Interesting local Astronomy talks take place in Home Counties every month, so please check the relevant web-site for any updates and contact details. Why not pay them a visit and support astronomy on your doorstep!

Aylesbury Astronomical Society

www.aylesbury-astronomy.org.uk chairman@aylesbury-astronomy.org.uk

Popular observing nights take place at the society's observatory twice a month. Their meetings take place on the first Monday of each month at 7:30pm until approx 9:30pm at the Scout Hut on Oakfield Road in Aylesbury. Non-members are welcome to go along to meetings to get to know them before becoming a member of the society.

Milton Keynes Astronomical Society

www.mkas.org.uk vicechairman@mkas.org.uk

Milton Keynes AS was formed in 1972 and has a long history of observing and lectures. Meetings are held at Rectory Cottages, Church Green Road, Bletchley, Milton Keynes, MK3 6BJ. All their meetings are open to the public and visitors are always welcome.

Please see their website for dates and contact details.

AstroSouth

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The Peter Harrison Planetarium www.rog.nmm.ac.uk

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Interesting local Astronomy talks take place in the South every month, so please check the relevant web-site for any updates and contact details. Why not pay them a visit and support astronomy on your doorstep!

Wycombe Astronomical Society

www.wycombeastro.org.uk

Since 1981 this group has grown to about 80 members and has it's own observatory with a 10" telescope. It has a busy calendar of events and an informative website. Wycombe Astronomical Society meets at Woodrow High House just off the A404 between Amersham and High Wycombe in Buckinghamshire. Main meetings are on the third Wednesday of every month. On the first Thursday of every month they have practical evenings which are based at the observatory.

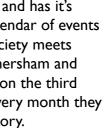
Please see their website for contact details

Events

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bookings@nmm.ac.uk

Events



Cover Story

Words: David Woods **Pictures: Graham Green**

The New Space Race Part III - Financing the New Frontier...



If you remember

- there currently is a dash to the Moon by 2015 all in the name of Helium³. This amazing element could power the Earths energy needs for a few millennia. While a rare element on Earth - it is supposedly in abundance within the Moons regolith and the race is on to see who can extract it and get it back to Earth first.

This highly sought after material is the 'Holy Grail' of nuclear fusion and therein lies the rub with NASA. Nuclear fusion is still decades away and spending billions of dollars setting up mining bases on the Moon for a material that has only a theoretical use is not one that has carried much weight. President Obamas' address to Congress in April 2010 saw a re-calibration of NASA's future business goals, with various colonisation projects well advanced, such as the Mars 500, these low cost projects are easier to fund.

Last month NASA purchased the data from the 30million dollar Luna XPrize, sponsored by Google. This is where private enterprise will interface with Government bodies in the future. NASA has re-started it's previous work on it's heavy launch vehicle, these supersized rockets will be the space juggernauts that will help transport men and materials to set up bases on the Moon and also Mars. Other countries and commercial organisations will then be focusing on mining technologies whilst NASA appears to be focusing on logistics. This makes sense, as NASA is one of the few organisations that have the resources and the history to undertake such a task.

Since the Apollo Moon programme over 90% of all space missions have been in low Earth orbit (less than 100 milers). By extending the use of the International Space Station until 2020 and concentrating on projects such as the James Webb Space Telescope, NASA can continue to gather data on endurance and the environment. This data can then be fed back into private enterprise to assist with building safe and reliable launch vehicles. Eventually NASA could become positioned as a regulatory body for the fledgling be a potential source of funding. commercial space flight industry.

Tourism has recently taken a step closer to reality and it is only a matter of time before other companies will follow suit. It looks as though NASA is trying to create a framework for a brand new industry that the UK is ideally placed to enter into.

part to play in this too as we would be able to track spacecraft using telescopes and radio astronomy, similar to techniques used in the Anything is possible if you want it first Space Race. Now we have to be. telescopes that can be bought that outperform equipment from DW



40 years ago. I'm not saying that we'll all have a 'command centre' in our garden, but we can already see satellites gliding overhead on a dark night and wouldn't it be great if we could use our telescopes to look at something else – other than the stars?

Radio astronomy could become more interesting as there could be a convergence of technologies between visual and radio astronomy. Imagine that you are a space business and required a network of tracking stations to monitor your vehicles once in flight. This network could be used to verify your own data and it would make some hobby equipment very useful devices indeed. If you are an astronomy group then it could even

Maybe this sounds like a flight of Virgin Galactics venture into Space fancy and it may be decades off, but after what President Obama has announced – that private enterprise is to help shape mans space flights and future exploration – is it such a crazy idea? After all - if I had told you fifteen years ago that today you would be able to take images of the M51 Whirlpool Galaxy, which is We astronomers could also have a 135 million light years away, from a telescope in your back garden would you have believed me?



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Since the launch of Look Up! in May 2008, our online publications have been often imitated but never bettered. The new AstroNorth Directory complements AstroSouth, by providing a regularly updated resource of all the astronomy groups in the UK. It's been a knockout success so far.

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Making Astronomy Shine

•Look Up! Downloads average 51 countries Dec-2008 to Oct 2010

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HE UNIVERSE

AstroSouth Cambridgeshire

C is for: Cosmogony The study of celestial systems, including the Solar System, stars, galaxies, and galactic clusters.

Cambridge Astronomical Society

www.caa-cya.org btl21@cam.ac.uk

The CAA is also the Cambridge Young Astronomers (CYA) and has a busy schedule of events for both young and old astronomers. They have a 12" telescope and their meetings are held at the Institute of Astronomy, Madingley Road, Cambridge. Please see their website for dates and contact details.

Papworth Astronomy Club

www.papworthastronomy.org kpt2@tutor.open.ac.uk

This enthusiastic club holds regular monthly meetings in Papworth Everard in the Vinter Room, Vinter Close. Meetings are usually on the first Wednesday of the month at 7.30pm, and feature a mixture of invited speakers, equipment demonstrations and viewing sessions. Check their website for further information and contact details.

Peterborough Astronomical Society

http://www.pas-stargazer.co.uk martinhall20@hotmail.com http://peterboroughastrosociety.blogspot.com/

The new meeting venue for the PAS is now the Copeland Community Centre.Copeland, Bretton, Peterborough, PE3 6UK. They meet at 7:30 pm on the first Thursday of each calendar month except July and August. Visitors are welcome at any of their meetings on payment of a small fee. They are a small group with usually about 15 to 20 persons attending each meeting. Please contact Martin Hall on the above email or see website for more info, new venue directions/map and to download a membership form.

AstroSouth"

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StarDome Planetarium

Cambridgeshire phone: 01223 440 593 & M: 07747 484975 website: www.stardomeplanetarium.co.uk email: andygreen@ stardome-planetarium.com

Events

If you have any talks or events you wish to be included in this listing then please get in touch.



G is for: Geosynchronous Orbit An orbit in which a satellite's orbital velocity is matched to the rotational velocity of the planet. A spacecraft in geosynchronous orbit appears to hang motionless above one position of a planet's surface. Satellites such as Astra 2D (for your TV) that just cover the UK fly like this.

Peterborough A S Meetings 2010

7th October	A talk by Paul Money "Images of the U
	The third part of Paul's talk about his fo
4th November	A talk by Mark Hurn (loA Cambridge)
	Neptune"
	The story of the failed Cambridge hunt
	1846
2nd December	Christmas Party Evening and Raffle

Sawtry & District Astronomical Society

chris.bernard I @tiscali.co.uk

The SDAS meet on the last Friday of the month at 19:30 at Greenfields Cricket Pavilion, Sawtry Fen, Huntingdon, Cambridge, PE28 5XN. Please go along to a meeting or contact Chris Bernard above for more information.

Cotswold Astronomical Society

www.cotswoldas.org.uk info@cotswoldas.org.uk

Meetings of the society are held monthly on the second Saturday of the Month, starting at 7.45 p.m. at the Millennium Hall of Shurdington Social Centre, Shurdington, Cheltenham. Please see their website for more information.

> Acrobat Tip: You can click on any weblink within the AstroSouth Directory to take you to that site!

Please ensure your details and events are up to date! Please e-mail your latest information and Press Releases to: sharon.rose@hantsastro.org

Jniverse Vol 3" favourite images) "Failed to fınd

for Neptune in



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Explore@Bristol Planetarium Bristol

Various Monthly Visits Shows Check site for details + times and booking Cost - £11.90 Adults £7.70 under 16s http://www.at-bristol.org.uk/ Education/Planetarium.htm

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Events



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www.vulcantothesky.org









Letchworth & District Astronomical Society www.ldas.org.uk chair@ldas.org.uk

This large group has been going since 1991 and now has over 80 members, it also has it's own observatory north of Letchworth and has a number of telescopes at it's disposal. Meetings are held on the last Wednesday of each month, starting at 7:30pm, normally at Plinston Hall in Letchworth. Plinston Hall is located in the centre of Letchworth and is well sign-posted. Please contact Jerry Stone, their Chairman, on the email above or more information or go to their website.

South West Hertfordshire Astronomical Society

www.swhas.org.uk secretary@swhas.org.uk

SWHAS was founded in 1968 and has had a full programme of meetings for the past several years. The Society has access to a planetarium, where a monthly tour of the night sky is conducted. Visitors and prospective members are welcome to attend their meetings. For full details of membership please contact their secretary (Phil McMahon) or see their website for more information.

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0208 3126531 bookings@nmm.ac.uk

StarDome Planetarium

Cambridgeshire phone: 01223 440 593 & M: 07747 484975 website: www.stardomeplanetarium.co.uk email: andygreen@ stardome-planetarium.com

Events



AstroSouth Northamptonshire

N is for: Newton's Laws of Motion 1. A body continues in its state of constant velocity (which may be zero) unless it is acted upon by an external force. 2. For an unbalanced force acting on a body, the acceleration produced is proportional to the force impressed; the constant of proportionality is the inertial mass of the body. 3. In a system where no external forces are present, every action force is always opposed by an equal and opposite reaction.

Northampton Astronomical Society

www.hamal.demon.co.uk ram@hamal.demon.co.uk

They run regular events and hold lectures and observing sessions. For all details please go to their website.

Northamptonshire Natural History Society

www.nnhs.info/astro/astromain.htm

Formed back in 1957, this section of the Natural History Society (which dates back to 1876) is also involved with the WorldAstroCast, they boast a comprehensive series of lectures and talks as well as some leading lights in the amateur astronomy community. They hold monthly meetings - please visit their website for further details

Northants Amateur Astronomers

www.naastronomy.com jerry.bell@googlemail.com

Founded in 1983, this group hold regular meetings and 'star watches' which have proven to be very popular. Their meetings are held on the Ist and 3rd Tuesdays of the month at the Church House in St Botolphs Rd, Barton Seagrave. Please see their website for further information and contact details. (complete online form) or e-mail: Jerry Bell.

Nene Valley Astronomical Society

www.neneastro.org.uk stevemwilliams@fsmail.net

The Neve Valley Astronomical Society do not charge for annual membership. Observing is free to all and you can also borrow a telescope for free.

They have fortnightly meetings at the Friends Meeting House, St. John Street, Wellingborough, with excellent speakers and charge just £2.00 admission to cover costs. Please contact Steve Williams on the above email for more details or go to their website

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StarDome Planetarium

Cambridgeshire phone: 01223 440 593 & M: 07747 484975 website: www.stardomeplanetarium.co.uk email: andygreen@ stardome-planetarium.com

Events

If you have any talks or events you wish to be included in this listing then please get in touch. AstroSouth **Suffolk**

Orwell Astronomical Society Ipswich

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

With over 100 members this group has been going since 1967 and boasts a rich heritage from the Orwell Park Observatory. It holds open days for the public as well as lectures and observing sessions for it's members. Please check their website for details of joining and Open Days at Orwell Astronomical Society (Ipswich), c/o Orwell Park School, Nacton, Ipswich, IP10 0ER

Stour Astronomical Society (Suffolk)

www.stourastro.org.uk secretary@stourastro.org.uk

This group was founded in 2003 and meets monthly for talks and observing sessions. They meet in the Jubilee Room of Cavendish Memorial Hall on the first Tuesday of every month at 7.30 p.m. If you would like to join or want more information please go to their website or contact their secretary above.

Stour Astronomical Society Talks/Listings 2010

Tuesday 2nd November 2010 "Exoplanets" - Frazer Pearce University of Nottingham

Tuesday 7th December 2010 "Henry Cavendish" - Tony Dagnall

Tuesday 4th January 2011 "The Night Sky for January" - Chris Strellis

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Events



AstroSouth Warwickshire

W is for: Wavelength (Often denoted by I, the Greek letter letter lambda.) The distance between two crests of a propagating wave of a single frequency n. If v is the velocity at which the wave advances, v=ln.

Rugby & District Astronomical Society

www.rugbyastro.co.uk julianleck@aol.com

The Rugby & District Astronomical Society meet every third Sunday of the month at 7.30pm at the CVS House, 19-20 North Street, Rugby CV21 2AG. For further details please contact their Secretary Julian Leckie on the above email.

Stratford Upon Avon Astronomical Society

www.astro.org.uk mike.whitecross@astro.org.uk

The Stratford Upon Avon Astronomical Society meet twice a month at the Home Guard Club in Tiddington, on the outskirts of Stratford upon Avon. Their club night, held on the second Wednesday of the month, consists of a practical astronomy workshop or general discussion between members and, where possible, is followed by actual observation. Their lectures take place on the fourth Tuesday of the month and are normally given by a professional astronomer. Please just turn up at one of the meetings, everyone is welcome and there is no pressure to join. If you would like further information please contact Mike Whitecross their Chairman, on the above email, or go to their website.

West Midlands

Birmingham Astronomical Society

www.birmingham-astronomy.co.uk

The Birmingham Astronomical Society was founded in 1950 and meet every Wednesday evening in the club room and basement workshop at Aston University. They also have monthly lectures from a variety of guest speakers in Lecture Room 146, Aston University on the last Tuesday of most months. New members are always welcome. All are welcome at their varied lectures at 7.30pm in Room 146 at Aston Uni (see website for details).

For more information please complete a contact form on their website.

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Events

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Coventry & Warwickshire Astronomical Society

www.covastro.org.uk cov_wark_as@yahoo.co.uk

The Coventry & Warwickshire Astronomical Society (originally formed in 1939) meetings are usually held once a month on the second friday of each month. They meet at the Earlsden Methodist Church Hall, Earlsdon Avenue South, Earlsdon, Coventry, CV5 6NF. Please go along to any meeting where you will be warmly welcomed or check their website for more details.

The Heart of England Astronomical Society

http://sites.google.com/site/hoeastro/ secretary@hoeas.co.uk

The Heart of England Astronomical Society meet every Thursday evening throughout the year (except Christmas week) from 9pm onwards, at the 'Old Exchange' meeting rooms in the village of Furnace End, North Warwickshire. External meetings are also held at Kingsbury Water Park, usually in Spring and Autumn. Please check the events page on their website for further information and also contact details.

Knowle Astronomical Society.com

www.knowleastro.org.uk nftest00@hotmail.com

The Knowle Astronomical Society was formed in 2001 and comprises a mixed membership with a wide variety of skills and disciplines. They meet on the first Monday of the month at St George & St Teresa's Catholic Church in Dorridge at 8.pm. Visitors are most welcome. Please check the website for directions and contact details.

Walsall Astronomical Society

secretary@walsallastro.co.uk

The society holds meetings starting at 8.30pm most Thursdays at the Rushall Olympic Football Club, off Dales Lane, Rushall, Walsall. Visitors are very welcome to attend. Please email the Secretary on the above email for further details. New website under construction.

Wolverhampton Astronomical Society

http://www.wolvas.org.uk/ grahammogford@hotmail.com

The Wolverhampton Astronomical Society was founded in 1951 and is open to anyone with an interest in astronomy and space exploration. They meet at the Environmental Centre, Highfields Specialist School, Boundary Way, Penn, Wolverhampton, WV4 4NT, once every two weeks between September and April. The society is open to anyone with an interest in astronomy and all levels are catered for. Please check their website for further details and contacts.

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Events



AstroSouth Norfolk

Norwich Astronomical Society

www.norwich.astronomicalsociety.org.uk drbalcombe@tiscali.co.uk

Meetings are held at Seething Observatory, Toad Lane, Thwaite St. Mary, Norfolk NR35 2EO

The Society's 'club night' is held on Friday evenings from 7.30pm onwards, they are a very friendly group willing to welcome new members and show them around.

Visitors are more than welcome to go along to the Observatory to have a look around and see what they get up to. If its clear, the telescopes will be available to look through, if its not clear, you will find them chatting over a cup of tea, or working to improve the facilities. Either way you will receive a very warm welcome. Please go to their website for contact details and directions.

Breckland Astronomical Society

www.brecklandastro.org.uk chairman@brecklandastro.org.uk

All meetings take place at Great Ellingham Recreation Centre, and begin at 7.30pm. Doors are open from 7.15pm. Please go to their website for more details or please contact their chairman on the above email.

North Norfolk Astronomical Society

www.nnas.org

NNAS are a relatively small group of people (currently about 40 members) who have a common interest in astronomy. Some have telescopes but this is not essential as the Society has its own equipment. They arrange guest speaker evenings through the year when they can afford them, covering a wide range of topics by specialists in their field. They are currently held at General Townsend Club (Royal British Legion), Fakenham. Recently they have seen the introduction of a fully restored 12 inch Calver telescope, in a purpose built observatory in Wiveton. This is a historic instrument dating from the early years of the last century, and produces fine images of the moon and planets. For contact details and online form please go to their website.

AstroSouth

Nov'10 - Jan 2011

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The Astronomy **Road Show** Sittingbourne, Kent

We can travel up to 150 miles from Kent.We can incorporate other subjects in our shows Over 100GB of material is available as well as models, geology samples & meteorites for the shows.

phone:01795 420 372 www.astronomyroadshow.com astroroadshow@blueyonder.co.uk

Events



www.astrosouth.org



'UK scientists have won the lead in over €5M worth of contracts, in a new initiative to unlock the complexities of climate change. This new programme, the ESA Climate Change Initiative, will use Earth Observation (EO) to help generate Essential Climate Variables (ECV's) for our planet. The UK Space Agency has contributed £15 million over 6 years to the ECV programme, or approximately 20% of the overall project budget.

Essential Climate Variables (ECV's) is the term used to describe those key environmental parameters which, taken together, are able to describe our past, present and future climate on Earth. These include atmospheric variables, such as ozone content, as well as snow cover, fire disturbance and ocean salinity. Without a solid description of these key indicators of our environment we will not be able to understand and mitigate against consequences of climate change such as hurricanes, El Niño effects, flooding, and other extreme weather events.

David Williams from the UK Space Agency said, "This outcome reflects the impressive UK record in Earth Observation data handling, data assimilation and climate modelling. Excellent programmes like these mean the UK can help lead European efforts to understand the changing face of our planet."

Following a competitive bidding process to address 10 ECV's, UK scientists have won involvement in every successful bid and will lead on 3.

The 3 winning UK-led bids are for:

1. Sea Surface Temperature

This is led by Dr Chris Merchant at the University of Edinburgh. He said: "Over the next three years, the aim of the project is to build a more complete and accurate picture of how the surface temperatures of the world's oceans have evolved over the last two decades. Sea surface temperature is now recognised as a key indicator of the world's most severe weather events. We will do this by combining

observations from several environmental satellites. Central to the whole enterprise is a series of ultraaccurate sensors (the "Along Track Scanning Radiometers") that were largely developed in the UK, and have been flying since 1991. As well as reevaluating past temperature changes in the ocean, the project looks forward. We are going to design a system for monitoring marine climate change from space for many years to come. It is a big challenge, but I'm glad to say I have a truly excellent team to work with, from five countries round Europe." The project funding is €1.8M, more than half of which will be spent on research in the UK.

2. Ocean colour

This is led by Dr Shubha Sathyendranath at the Plymouth Marine Laboratory. Over the next 3 years the project will use data from ESA and NASA satellites to help build up a long-time series, calibrated and consistent record of ocean colour across the globe. Ocean colour can reveal information about chlorophyll concentration and water clarity - both key indicators of the health of our oceans. By unravelling the complex behaviour of our oceans we can contribute to understanding global climate issues. This will be achieved by drawing on interdisciplinary expertise between Earth Observation, climate research and modelling communities. The total project funding is €1.8M.

3. The Climate Modelling User Group (CMUG)

Led by Dr Roger Saunders at the Met Office, is a cross cutting activity looking at the data requirements of the climate modelling and reanalysis communities. CMUG will identify what is required to integrate EO data with climate models. The CMUG will also assess some of the climate data records generated by the CCI projects by comparing them with climate models and reanalyses. The CMUG contract is worth almost €1.5M with the Met Office as the coordinator and science lead.



AstroSouth Space Industry South

UK Space Agency

Polaris House North Star Avenue Swindon Wiltshire SN2 1SZ



Tel: +44 (0)20 7215 5000 Email: via website http://www.ukspaceagency.bis.gov.uk/

The UK Space Agency is at the heart of UK efforts to explore and benefit from space.

On 23 March, the new UK Space Agency was launched to replace the British National Space Centre and to bring all UK civil space activities under one single management..

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Avanti has supported the use of Ka-band technology in Europe and their first Ka-band satellite, HYLAS 1, will launch in the second quarter of 2010, with their second satellite, HYLAS 2, launching in the first half of 2012.

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ComDev Europe supplies complex equipment, technology solutions and subsystems for space and terrestrial applications to major commercial organisations and MOD UK.







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The Peter Harrison Planetarium

www.rog.nmm.ac.uk

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bookings@nmm.ac.uk

StarDome Planetarium

Cambridgeshire phone: 01223 440 593 & M: 07747 484975 website: www.stardomeplanetarium. co.uk email: andygreen@ stardome-planetarium.com

Events



www.astrosouth.org

SPACE NEWS

Virgin Galactic's SpaceShipTwo glides back to SpacePort America

EVES MANNED FREE Commenting on the

VSS ENTERPRISE ACHIEVES MANNED FREE FLIGHT FROM OVER 45,000 FT (13,700 METRES) AND SUCCESSFULLY GLIDES TO LAND IN 11 MINUTES AT MOJAVE AIR AND SPACE PORT

10th October 2010, Mojave, CA. Virgin Galactic, the US company developing the world's first commercial manned space flight system and tourism business, is delighted to announce the successful completion today of the first piloted free flight of SpaceShipTwo, named the VSS Enterprise. The spaceship was released from its mothership at an altitude of 45,000 ft (13,700 metres).

During its first flight (visit www.virgingalactic.com to view more images) the spaceship was piloted by Pete Siebold, assisted by Mike Alsbury as co-pilot. The two main goals of the flight were to carry out a clean release of the spaceship from its mothership and for the pilots to free fly and glide back and land at Mojave Air and Space Port in California.

Other detailed objectives of the flight were successfully completed, including; verification that all systems worked prior and following the clean release of Enterprise; initial evaluation of handling and stall characteristics; qualitative evaluation of stability and control of SS2 against predictions from design and simulation work; verification of performance by evaluating the lift-to-drag ratio of the spaceship during glide flight; practice a landing approach at altitude and finally descend and land.

Commenting on the successful flight Scaled Composites pilot, Pete Siebold, said "The VSS Enterprise was a real joy to fly, especially when one considers the fact that the vehicle has been designed not only to be a Mach 3.5 spaceship capable of going into space but also one of the worlds highest altitude gliders."

Picture: Virgin Galactic

Sir Richard Branson, founder of Virgin Group, who was present during the first successful flight, added "This was one of the most exciting days in the whole history of Virgin. For the first time since we seriously began the project in 2004, I watched the world's first manned commercial spaceship landing on the runway at Mojave Air and Space Port and it was a great moment. Now, the sky is no longer the limit and we will begin the process of pushing beyond to the final frontier of space itself over the next year."

Virgin Galactic is now well on the way to becoming the world's first commercial space line with 370 customer deposits totalling \$50 million.

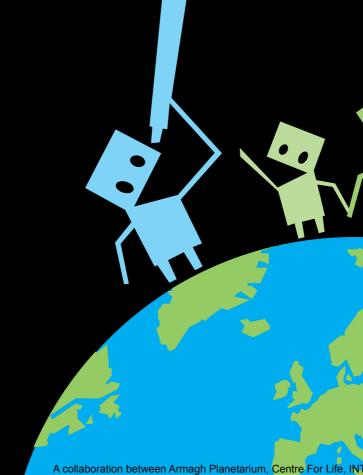
George Whitesides, CEO of Virgin Galactic added "To see the world's first manned commercial spaceship landing on a runway is a sight I always dreamed I would behold. Now, our challenge going forward will be to complete our experimental program, obtain our FAA licence and safely bring the system into service at Spaceport America, New Mexico."



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We Are Astronomers narrated by David Tennant is an exciting new 360° Fulldome digital planetarium show produced by NSC Creative with input from UK astronomers



66 HantsAstr

ASTRONOMERS

narrated by David Tennant

A collaboration between Armagh Planetarium, Centre For Life, INTECH Science Centre & Planetarium, National Space Centre, Our Dynamic Earth, Royal Observatory Greenwich, Spaceport with funding from the Science and Technology Facilities Council. Gunnels Wood Road Stevenage Hertfordshire SG1 2AS Tel: +44 (O) 1438 773872 http://www.astrium.eads.net/

Astriums technical excellence includes launch vehicles, manned space activities and satellite systems and related services, and boasts some of the most advanced design, manufacture and test facilities in the space industry.

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Alter UK has worked in the space industry for over 30 years on almost every new-build satellite and space programme and are the market leader globally. They provide testing, engineering, procurement, storage, quality control, certification and consultancy for all high reliability electronic component requirements.

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> Norman Lockyer Observatory & Planetarium Sidmouth, Devon

Various Monthly Visits Shows Check site for details + times and booking Cost - £5 Adults £2.50 under 16s http://projects.exeter.ac.uk/nlo/ Home~EN.php

Space Odyssey

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Explore@Bristol Planetarium Bristol

Various Monthly Visits Shows Check site for details + times and booking Cost - £11.90 Adults £7.70 under 16s http://www.at-bristol.org.uk/Education/Planetarium.htm

Events

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Infoterra are a leading supplier of geospatial products and services, that help Governments and industrial organisations worldwide derive the business benefits from accurate spatial data.

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National Physical Laboratory Hampton Road Teddington Middlesex TW1 OLW Tel: +44 (0)20 8977 3222 Fax: +44 (0)20 8614 0446 enquiry@npl.co.uk www.npl.co.uk

The National Physical Laboratory (NPL) is the UK's National Measurement Institute and is a world-leading centre of excellence in developing and applying the most accurate measurement standards, science and technology available. For over 100 years NPL has developed and maintained the nation's primary measurement standards which underpin an infrastructure of traceability throughout the UK and the world.



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INTECH Science Centre + Planetarium Winchester, Hants

Cost £2 per show in addition to exhibition entry Cost - £6.95 Adults £4.65 under 14 Check site for schedule www.intech-uk.com

Southdowns Planetarium

Chichester, West Sussex Various Monthly Shows Check site for details + times and booking Cost - £6 Adults £4 under 16s www.southdowns.org.uk/sdpt

Space Odyssey

Foxglove Banks, 35 Longmead, Hemyock, Devon, EX15 3SG phone: 0844 335 1353 website: www.spaceodyssey.co.uk email: info@spaceodyssey.co.uk

Events



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QinetiQ provide research, technical advice, technology solutions and services to customers in core markets of defence and security, and are now working to transfer expertise and capabilities into markets such as energy and environment.

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Southend Planetarium

Central Museum. Victoria Avenue, Southend on Sea. Essex SS2 6ES phone: 01702 434449 website: www.southendmuseums.co.uk email: museums@southend.gov.uk

The Peter Harrison Planetarium www.rog.nmm.ac.uk

The Peter Harrison Planetarium is based at The Royal Observatory Greenwich, National Maritime Museum in London and has a 116 seat digital planetarium. They offer a wide range of shows for schools and the general public, including the prerecorded shows and live presentations by Royal Observatory Astronomers. It operates the well regarded Digistar 3 system and is the only planetarium in Europe utilising the high resolution E&S laser projection system, providing a vibrant visual experience. Robert Edwards 0208 3126531 bookings@nmm.ac.uk

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SEA (Group) Ltd specialise in systems engineering, software and electronic engineering services and solutions to Government and Industry with activities in the Aerospace market as well as Defence and Public Sector.

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Southdowns Planetarium Chichester, West Sussex

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Island Planetarium and Dr. Robert Hooke Exhibition

Fort Victoria Country Park, Westhill Lane, Yarmmouth, Isle of Wight, PO41 **ORRA** Evening Astronomy Lectures/ Shows, Stargazing Evenings and Courses. See web site for full details phone:0800 1958295 or 01983 761555 www.islandplanetarium.co.uk email:enguiry@islandastronomy.co.uk

Events



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University College London Department of Space & Climate Physics Mullard Space Science Laboratory Holmbury St. Mary Dorking Surrey RH5 6NT Tel: +44 (0)1483 204100 Fax: +44 (0)1483 278312 www.mssl.ucl.ac.uk

MSSL is the largest university space research group in the UK and have participated in over 35 satellite missions and over 200 rocket experiments as well as researching the Earth's climate and events at the limits of the known Universe. They also design, build and test instruments and other spacecraft systems on site.



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INTECH Science Centre + Planetarium Winchester, Hants

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The Obervatory Science Centre Herstmonceux, Hailsham www.the-observatory.org

The Observatory Science Centre is located in the former home of the Royal Greenwich Observatory, nestled in and around the domes at Herstmonceux. They have a Mobile Mirror Dome Planetarium the 'Cosmic Classroom'.

It is 7m in diameter and 4.5m high and is principally used in their outreach programme to schools. Sandra Voss 01323 832731 outreach@the-observatory.org

Herstmonceux Events 2010 Nov 6 Comets & Curry Nov 13 Open Evening Nov 28 Centre closes on weekdays Dec 4/5 Open Dec 11 Geminids Open evening Dec 11/12 Christmas Weekend

Events

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Hershel Museum of Astronomy

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Explore@Bristol Planetarium Bristol

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Exemplar Associates provide experience for communications systems engineering expertise to the aerospace industry, including major communication satellite operators and aerospace manufacturers.

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> The Obervatory Science Centre Herstmonceux, Hailsham Admission £7.70/£5.70 Check site for schedule and opening dates

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www.the-observatory.org/

www.rog.nmm.ac.uk The Peter Harrison Planetarium is based at The Royal Observatory Greenwich, National Maritime Museum in London and has a 116 seat digital planetarium. They offer a wide range of shows for schools and the general public, including the prerecorded shows and live presentations by Royal Observatory Astronomers. It operates the well regarded Digistar 3 system and is the only planetarium in Europe utilising the high resolution E&S laser projection system, providing a vibrant visual experience. Robert Edwards 0208 3126531 bookings@nmm.ac.uk

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Satellite Services design and manufacture on-board sub-systems for high reliability smallsat applications, their products include Attitude Sensors and Actuators and TM/TC units.

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Explore@Bristol **Planetarium** Bristol

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Norman Lockyer Observatory & Planetarium

Sidmouth, Devon

Various Monthly Visits Shows Check site for details + times and booking Cost - £5 Adults £2.50 under 16s http://projects.exeter.ac.uk/nlo/ Home~EN.php

Space Odyssey

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Events







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