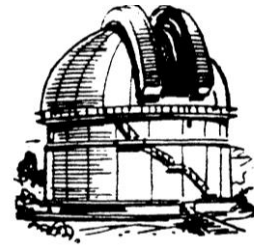

Journal

of the



Nottingham Astronomical Society

September 2007

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Thursday, 6th September

at the

British Geological Survey

Nicker Hill, Keyworth

8 pm (doors open at 7.30pm)

Tonight we welcome

Christopher Conselice

of the University of Nottingham

who will be speaking on

How Galaxies are Formed

BIG HOLE IN SPACE

Astronomers at the University of Minnesota have used data from the VLA Sky Survey, a project that imaged the entire sky accessible to the Very Large Array radio telescope, to infer the existence of an enormous void in space. It is a region empty of all stars, dust, gas and galaxies, in the constellation of Eridanus. The hole is nearly a billion light-years across, making it very much larger than any previously-known cosmic void.

Attention was drawn to this particular area of sky by observations originally made by the Wilkinson Microwave Anisotropy Probe (WMAP) satellite, launched in 2001. These showed a “cold spot” in the direction of Eridanus. The void itself is about 8 billion light-years from Earth.

Sky Notes

2007 September

Compiled by Roy Gretton



THE AUTUMNAL EQUINOX (when the Sun, on its southward journey, is exactly overhead on Earth's equator) occurs just before 11 a.m. BST on September 23rd.

PHASES OF THE MOON

Last Quarter occurs early on the morning of the 4th

New Moon occurs around midday on the 11th

First Quarter occurs in the afternoon of the 19th

Full Moon occurs in the early evening of the 26th

This month the Moon is closest to Earth on the 28th, and furthest from Earth on the 15th.

THE PLANETS

Mercury is an evening object throughout September, but difficult to observe from the U.K. due to its southerly declination. It will reach greatest eastern elongation on the 29th, but even then it will be just a few degrees above the southwestern horizon at sunset.

Venus, after its memorable evening apparition last spring, has now become a morning object, and by the end of the month will be rising about four hours before the Sun. It will be situated in the constellation of Leo and, shining at magnitude -4.5, should be easy to spot if you are an early riser.

Mars, now rising in the late evening, is well into its latest apparition which will reach its climax on Christmas Eve. During September it heads from Taurus into Gemini, and on the 30th will be one degree away from the bright open star cluster M35. The planet's disc is now nearly ten arcseconds across, making it a suitable object for study through telescopes with apertures of at least eight inches.

Jupiter will continue to be visible in the evening sky throughout September, but by the end of the month it will be setting about 8 pm, so observing opportunities will be very restricted.

Saturn, having passed through conjunction with the Sun as recently as August 21st, is virtually unobservable this month.

Uranus (magnitude 5.7) reaches opposition to the Sun on September 9th, making this the best month of the year for observing the planet. It is situated in the constellation of Aquarius. **Neptune** (magnitude 7.8) is an evening object in the constellation of Capricornus.

METEORS

The Piscids are predicted to reach their maximum activity (about 10 meteors per hour) on September 8th, close to New Moon and so favourable for observation this year.

VARIABLE STAR: Algol

There are five minima of the dark-eclipsing variable star Algol (Beta Persei) visible from the UK this month. They occur on September 6th (2.50 am BST), the 8th (11.30 pm), the 11th (8.20 pm), the 26th (4.30 am) and the 29th (1.15 am). The star dims from its normal brightness (magnitude 2.1) to magnitude 3.4 over a period of about five hours.

The BGS 3D Immersion Suite

Feedback from those attending the BGS 3D Immersion Suite and who viewed images of Mars, said that this was one of our best events this year. Unfortunately in the advertisement for this event in our journal, we neglected to tell you who arranged this for us. The NAS committee therefore apologises for this oversight. It was Dr Douglas Tragheim (who is of course one of our members) who facilitated and presented this for us on the 5th July - thank you, Doug.

We would also like to thank BGS for use of the immersion facility and Luke Bateson and Bruce Napier from BGS, who created the fly-around of Olympus Mons Volcano.

Fred Hopper

DIARY DATES 2007-08

Meetings of the Nottingham Astronomical Society

Our programme for 2007 is below. Don't forget to check our website:
<http://beehive.thisisnottingham.co.uk/nottinghamastro>
for the latest information about the Society's meetings and observing sessions.

Thursday 6 September 2007

British Geological Survey, Keyworth
8.00pm (Doors open 7.30pm)
Talk: 'How Galaxies are Formed'
Christopher Conselice
University of Nottingham

Thursday 4 October 2007

British Geological Survey, Keyworth
8.00pm (Doors open 7.30pm)
Talk: 'Simple Sums for Astronomers'
Dr Roy Gretton
NAS Vice-President

Thursday 1 November 2007

British Geological Survey, Keyworth
8.00pm (Doors open 7.30pm)
Annual General Meeting 2007

Thursday 6 December 2007

British Geological Survey, Keyworth
8.00pm (Doors open 7.30pm)
[Topic to be arranged]

Thursday 3 January 2008

British Geological Survey, Keyworth
8.00pm (Doors open 7.30pm)
Members' Evening

Thursday 7 February 2008

British Geological Survey, Keyworth
8.00pm (Doors open 7.30pm)
***Talk: 'Beneath the Shadow of the Moon'**
Mike Frost

(*Subject to Speaker's availability on that date)

OTHER EVENTS

THE HERSTMONCEUX SCIENCE CENTRE ASTRONOMY FESTIVAL

7th, 8th & 9th September 2007

Camp under the backdrop of the historic domes and enjoy a packed weekend.

This year, speakers on Saturday will include: **Nik Szymanek** (Astrophotographer)

Dr Andy Newsam (Liverpool John Moores University), **Dr Paul Murdin** (Institute of Astronomy, Cambridge), **Prof. Brian Hunter** (Queens University, Canada). There will also be informal talks given by the **Sky at Night team** who are supporting the event this year.

Dr Anton Vamplew will be speaking on Sunday as part of the family activity fun day along with rocket demonstrations, rocket making and launching plus much more.

For more information please visit our website: www.the-observatory.org Alternatively you can contact the centre on **01323 833731**.

Don't miss out on this fantastic weekend. Come and soak up the atmosphere at the UK's home of astronomy and hopefully take a look through the historic telescopes, weather permitting of course!

Sandra Voss, Science Director, The Observatory Science Centre, Herstmonceux, Hailsham, East Sussex BN27 1RN

Phone:01323 832731 Fax: 01323 832741 www.the-observatory.org
Registered charity number: 298542

Stars line up for first World AstroCast

An all star speaker line up is being programmed for the first World AstroCast.

Scheduled for **13th October 2007**. Up to 22 recipient sites worldwide will be able to take part in the first live amateur astronomer video cast. Currently the following high-profile speakers have agreed to participate Stephen J. O'Meara, John Dobson, Martin Ratcliffe, Phil Harrington, Tom Boles, Tonny Vanmunster. A total of nine celebrity speakers are being recruited.

The event is being hosted by the Northamptonshire Natural History Society Astronomy Section (UK).

It is intended that there will be simultaneous translation in to four languages. Countries participating will be Australia, New Zealand, India, Spain, France, Germany, Italy, United Kingdom, Ireland, USA, Canada.

It is expected that between 1000 to 2500 amateurs will be participating in the event.

The programme starts at **08-00hrs UT** and continues until **20-00hrs UT** on **13th October**. This is all part of the 50th anniversary celebrations of the founding of the astronomy section in the Society.

Please look at our website <http://www.nnhs.info/wac.htm>

For more information please contact **Michael Finney (NNHS Astronomy section)**

Telephone number +44 (0) 121 378 5068, email nnhs_astronomy@yahoo.co.uk,

SKYPE address michael.finney1

Address: Northamptonshire Natural History Society, The Humfrey Rooms, 10 Castilian Terrace

Northampton NN1 1LD

Web address www.nnhs.info

Small Advertisements

Various items of equipment for sale

Celestron Nexstar 5 telescope and tripod etc.	£395
Tele Vue 8-24 click zoom eyepiece	£75
Vixen Lanthanum 20 eyepiece	£50
Meade 9.7 Super Plossl eyepiece	£25
Celestron 3.6 Plossl eyepiece	£10
Celestron 90-degree erecting diagonal	£10
sodium light pollution filter	£10

Reasonable offers from Society members considered

**Please contact Sam Boote
s.boote@bcs.org
0115 937 4644**

**This advertising space is available
free of charge to society members**

For Sale

10 inch reflector telescope, focal length 63 inches
with RA Drive
two eyepieces
and storage shed

Any reasonable offer accepted

Phone **Mr Chambers**
0115 914 1454

The Nottingham Astronomical Society: E - SERVICES

'Beehive' Website

Whether or not you are a NAS member, you can now keep up to date with details of the Society's meetings and other events by visiting the NAS 'Beehive' website:

<http://beehive.thisisnottingham.co.uk/nottinghamastro>

NAS Journal e-mailing list

To register for your monthly e-mailed copy of the NAS Journal, just e-mail

nottinghamastro@yahoo.co.uk

You don't have to be a Society member to take advantage of this service.

Nottingham Astronomical Society

The Nottingham Astronomical Society, and/or the Editor accept no responsibility for any errors that may occur within this publication. Any views expressed in the NAS Journal are those of the individual authors and not necessarily endorsed by the Nottingham Astronomical Society, its Committee or Members.

APPLICATION FOR MEMBERSHIP

If you would like to join the Nottingham Astronomical Society, please complete and tear off this slip. Make your cheque/postal order payable to: **THE NOTTINGHAM ASTRONOMICAL SOCIETY**. Then send the slip and payment to Paul Stocks, Secretary, Nottingham Astronomical Society, 22 Killerton Park Drive, West Bridgford, Nottingham, NG2 7SB

Alternatively you may hand the slip and payment to the Secretary or Treasurer at one of the Society's regular meetings.

Your name _____

Full address _____

_____ Postcode _____

I wish to join the Nottingham Astronomical Society and enclose the membership fee for:

- Full Adult £25
- Junior (17 years or under) £12.50
- Concession (*full time student, UB40, etc*) £12.50

Please tick and enter your e-mail address if you wish to receive:

- the monthly **NAS Journal** (in 'Word' format) by e-mail
- e-mail notifications of dates & times of observing sessions using the large telescope at our observatory.

Your e-mail address: _____

Nottingham Astronomical Society

Affiliated to the **British Astronomical Association**
Member of the **Federation of Astronomical Societies**
Member of the **Society for Popular Astronomy**
Supporters of the **Campaign for Dark Skies**
Registered Charity No: 1066645

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Joe Sowerby

Dorothy Sowerby

Kevin Greally

Meetings

Our meetings, often with an illustrated talk by a guest speaker, are held on the first Thursday of each month (except in August & October) at:

The British Geological Survey

Nicker Hill

Keyworth

Nottingham NG12 5GG

Doors open 7.30pm

Meetings start 8.00pm

Meetings end 10.00pm

Meetings are open to the public and visitors are always welcome to attend.

Annual subscriptions 2006-07

Adult	£25
Junior (under 18 years)	£12.50
Concessions*	£12.50
(*Full-time student, jobseeker's allowance, basic state pension)	

Subscriptions become due on 1 October. Half-price subscription is charged if joining after 1st April. Please make cheques payable to: Nottingham Astronomical Society.

If you would like more information about the **Nottingham Astronomical Society**, or would like to become a member, please contact the Secretary, Paul Stocks, or speak to any NAS committee member at one of the regular monthly meetings. A membership application form appears inside this issue of the Journal.
