# Journal



#### of the

## Nottingham Astronomical Society September 2009

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### Thursday, 3<sup>rd</sup> September

at the

British Geological Survey Nicker Hill, Keyworth 8 pm (doors open at 7.30pm)

> Tonight we welcome Dr Paul Roebuck

who will be speaking on "The time has come...!"

#### **REFLECTIONS ON THE SUMMER OF 2009**

As I write this, in the final week of August, the official meteorological statistics for the month have not yet been released, but I get the impression that in spite of the many complaints about the weather, this August has been sunnier than most (at least in the eastern half of England). I'm basing this feeling on the number of clear nights we've had in the past few weeks, for August has been a great month for observing. Various acquaintances have been asking me what those two bright stars are: the one that hangs low in the south in the late evening (Jupiter, of course) and the brilliant one that climbs high in the east in the hours before dawn (Venus). Unfortunately the nights around the Perseid maximum (11<sup>th</sup>-13<sup>th</sup> August) tended to be cloudy (I saw only one definite Perseid), but in recent weeks, as I've stared up at the majestic summer Milky Way, sporadic meteors have been much in evidence. In fact, early autumn is said to be the best time of year for sporadics, which is an extra reason to get out there under the sky!

There have been a number of important developments in the world of astronomy since the Society last met, not least of which was the collision of a comet or asteroid with the planet Jupiter, first detected by the Australian amateur, Anthony Wesley, on July 19<sup>th</sup>. The impact left Jupiter with a prominent "black eye", difficult to observe from the UK because the planet is fairly low in our sky. What is fascinating about this observation is the fact that the previous such collision, of Comet Shoemaker-Levy 9 with Jupiter in July 1994, was regarded as a once-in-a-lifetime (or longer!) event, but now we've seen two such occurrences in a mere decade-and-a-half. Does this mean that the Solar System is a more dangerous place than we had thought, or that we should be even more grateful to the King of Planets for sweeping up the debris, and protecting us here on Earth?

### **Sky Notes** September 2009





The Autumnal Equinox, when the Sun moves southward across the celestial equator, occurs on September 22<sup>nd</sup>.

#### PHASES OF THE MOON

Full Moon occurs on the afternoon of September 4<sup>th</sup> Last Quarter occurs in the early morning of the 12<sup>th</sup> New Moon occurs in the early evening of the 18<sup>th</sup> First Quarter occurs on the morning of the 26<sup>th</sup>

This month the Moon is closest to Earth (364,000 km) on the 16<sup>th</sup>, and furthest from Earth (404,000 km) on the 28<sup>th</sup>.

#### THE PLANETS

**Mercury** is poorly-placed for observation this month. It passes through inferior conjunction (between Earth and Sun) on September 20<sup>th</sup>.

**Venus** continues to shine brightly in the morning sky before dawn, though fading somewhat as September progresses, and moving slowly back toward the Sun, from which it will be separated by only 25 degrees by the end of the month.

**Mars**, still a morning object, now rises shortly before midnight. At magnitude 1 it is not yet particularly prominent in the sky, and with an apparent diameter of only six arcseconds, will not reveal much in the way of detail through telescopes.

**Jupiter**, now an evening object, is prominent as a bright, off-white "star" low in the southeast as darkness falls. By midnight BST it is nearly due south, and best-placed for observation. With an apparent diameter of nearly fifty arcseconds it is by far the best planet for telescopic viewing this month.

**Saturn** reaches conjunction with the Sun on September 17<sup>th</sup>, and will be unobservable for some time.

**Uranus**, by contrast, is at opposition on the 17<sup>th</sup>, and so this is the best month for observing this planet. It will be shining at magnitude 5.7, and so (theoretically) should be visible to the naked eye from a dark site. However, you will probably need at least the aid of binoculars to find it, in the constellation of Pisces, about three degrees south of the celestial equator.

**Neptune** is a much fainter object (magnitude 7.9) in the constellation of Capricornus.

#### **METEORS**

There are no prominent meteor showers this month, but the **Piscids** make a contribution to the general "drizzle" of material entering the Earth's atmosphere from the plane of the Solar System, making September a good month for spotting shooting stars.

#### 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: <a href="http://beehive.thisisnottingham.co.uk/nottinghamastro">http://beehive.thisisnottingham.co.uk/nottinghamastro</a>

#### 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.

#### **Nottingham University Event: Advance Notice**

Dr Amanda Bauer of the Nottingham Astronomy Group, Nottingham University, has invited NAS members to take part in their **"Space Day and Moon Watch"** at Nottingham Castle by bringing telescopes. There is room for 2 or 3 more telescopes at the event.

This will take place on the 31st October, from 3pm to 10pm.

Further details for the event can be found at http://nottsiya2009.pbworks.com/Space-Day-and-Moon-Watch.

If you are interested please send a reply to nottinghamastro@yahoo.co.uk or let a committee member know at the 3rd September meeting.

#### **DIARY DATES 2009/2010**

#### **Meetings of the Nottingham Astronomical Society**

Our programme for the coming months is below. Don't forget to check our website: <a href="http://beehive.thisisnottingham.co.uk/nottinghamastro">http://beehive.thisisnottingham.co.uk/nottinghamastro</a>

for the latest information about the Society's meetings and observing sessions.

#### Thursday 3 September 2009

British Geological Survey, Keyworth 8.00pm (Doors open 7.30pm) Talk: 'The time has come...! Dr Paul Roebuck

#### Thursday 1 October 2009

British Geological Survey, Keyworth 8.00pm (Doors open 7.30pm) Talk: 'Sounding out the Sun' Dr Roger New Sheffield Hallam University

#### Thursday 5 November 2009

British Geological Survey, Keyworth 8.00pm (Doors open 7.30pm) Annual General Meeting 2009

please see the Agenda in the November issue of the Journal

#### Thursday 3 December 2009

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

Talk: 'The Magnetic Solar System - an unfolding tale of plasma, planets and probes'
NAS member Dr Jon Woodcock
from the Astronomy Unit at Queen Mary, University of London

#### Thursday 7 January 2010

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

#### Thursday 4 February 2010

British Geological Survey, Keyworth 8.00pm (Doors open 7.30pm) Talk: 'Observatories without Telescopes' Dr. Daniel Brown from the School of Science & Technology Nottingham Trent University

#### Thursday 4 March 2010

British Geological Survey, Keyworth 8.00pm (Doors open 7.30pm) Talk: 'Observing Orion' Paul Money

If you know of anyone who is willing to give an astronomy or science-related talk at one of our monthly meetings, please let the Secretary (or any committee member) have their contact details



## Nottingham Astronomical Society 'Starwatch' public astronomy event



On **Saturday 26th September 2009** the Nottingham Astronomical Society is hosting a public astronomy event at the British Geological Survey Keyworth, Nottingham, as part of the International Year of Astronomy 2009 celebrations.

- Learn how to use a telescope and how to find items of interest in the night sky.
- See interesting stands set up by local astronomy societies.
- View stunning astronomical photographs.
- Solar observing during the afternoon, learn how to safely view the Sun using a telescope.
- See beautiful Crystal Nebulae sculptures, designed by Prof. Michael Merrifield.
- Paul Money will be available to sign copies of his books.
- View imagery of Mars in the BGS 3D suite during the afternoon.

Telescopes will be available to observe the night sky, viewing will include the Moon, Jupiter and the Andromeda Galaxy.

Listen to presentations throughout the evening, starting at 4:30pm.

#### The speakers are:

Dr Douglas Tragheim. British Geological Survey

Prof. Michael Merrifield Nottingham Astronomy Group, Nottingham University

Dr Boris Haeussler Nottingham Astronomy Group, Nottingham University

Paul Money FRAS Reviews Editor, The Sky At Night magazine

#### **Presentation:**

Images of the Martian landscape in the BGS 3D Suite.

"The History of the Telescope - From Three Inches to Forty Two Metres"

"From Big Bang to Today -A Short History of the Universe"

"Rambling through the Autumn Sky"
- a basic seasonal tour of the
best objects to observe in the night sky

Time: The event will be open to the public from 3pm to 10pm.

Venue: British Geological Survey Keyworth, Nottingham, NG12 5GG. Admission: There will be an admission fee of £2.50 to members of the public.

Members of astronomical societies get free admission with proof of membership.

Event updates may be found on the Nottingham Astronomical Society website at Starwatch Observing Event 26th Sept 2009









Ken Willoughby, St. Wilfrid's Catholic High School &
Carleton Community High School
Present

"Apollo 13: A Successful Failure."

Capt. Jim Lovell.
(APOLLO XIII COMMANDER.)
Gemini 7 & 8. Apollo 8 & 13.
Friday October 2nd 2009 @ 19:30

**(**a

St. Wilfrid's Catholic High School Cutsyke Road Featherstone WF7 6BD.

Tickets £40 each (cheques payable to Apollo 13.)

SAE to: Ken Willoughby, 11 Hardistry Drive, Pontefract WF8 4BU. 01977 795535.

e-mail: ken.willoughby@btinternet.com

Please include your e-mail/telephone number.

Jim will only sign copies of his book "Apollo 13." One autograph per person only. Dinner with Jim on Thursday night is sold out.

Visit St. Wilfrid's Catholic High School web site and click on info for directions. St-wilfrids.wakefield.sch.uk

Tickets for Ed Mitchell (April 9<sup>th</sup> 2010) will be on sale @ £30. Priority given to people who attend the Lovell talk.

## Lincoln Astronomical Society are holding a convention on 10th October to celebrate their 50th anniversary

The speakers are:

Paul Money FRAS. The subject of his talk is 'Space Observatories Roundup'.

Mark Hurn of the University of Cambridge . The subject of his talk is 'Failed to find Neptune'

Peter Rea of Cleethorpes Astronomical Society. The subject of his talk is 'Panoramic Moon'.

Dr Andy Longmore of the Royal Observatory Edinburgh . The subject of his talk is 'Astronomical Adaptive Optics (Taming Atmospheric Seeing)'

Professor Barrie Jones of the Open University. The subject of his talk is 'Pluto Sentinel of the Solar System'

Lincoln AS are hoping to have members of all the nearby societies at the event. Admission is by ticket only, price £10 per person. Please see their website www.lincolnastronomy.org for more details.

Please email Phil Norton if you wish to buy tickets.

#### phil@lincolnastronomy.org

*Editor's Note*: I attended the convention for Lincoln's 40<sup>th</sup> anniversary, along with several other members of the NAS. It was an enjoyable, well-organised event, held at the Lincoln Astronomical Society's observatory and adjacent lecture room.

#### **Small Advertisements**

#### Equipment for sale

Celestron 1 ¼" visual back £5
Celestron 1 ¼" star diagonal (prism) £10
Celestron 2" star diagonal (mirror) £20

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

#### **FOR SALE**

**Vixen** single-axis (Right Ascension) drive motor and hand controller to fit Great Polaris or GP-DX equatorial mount.

Also battery case for use with the above.

£28

Email the Editor: roygretton@hotmail.co.uk

#### For Sale

#### Meade Telescope with GOTO control system £100

4.5" (114mm) equatorial reflecting telescope, with Starfinder Electronic Hand Controller
910mm focal length, f/8
precision polished 4.5" aluminized mirror
5x24mm viewfinder

#### **Contact John Aitken**

Tel: 01476 577599 Email: <u>i\_aitken@hotmail.co.uk</u>

NAS Members may submit private advertisements for inclusion free of charge in the Journal. Please email the Editor.

#### NAS Membership application 2008/09

If you would like to join the Nottingham Astronomical Society, please complete the form below. Hand the slip and payment (cheque or cash) to the Treasurer at any of the Society's meetings.

If paying by cheque, please make it payable to **Nottingham Astronomical Society**. Alternatively, you may post the slip and your cheque *(not cash)* to

Sam Boote, Treasurer Nottingham Astronomical Society 17 Rannock Gardens Keyworth Nottingham NG12 5FQ

Title: Name	<b>:</b>		
Address including po	ostcode:		
Telephone:			
e-mail:			
		olease tick one bo	
Subscription rate:	Full	£25.00	
	Concession	£12.50	
	Half-year*	£12.50	
	Concession half-y	year* £6.25	
*Half-year is available fro	om 1 April to 30 Septemb	er	
Gift Aid			
Gift Aid? Please ask the a registered charity, the		declaration form.  In the taxman for	u like to register for You need to fill it in only once. As each £25 subscription. You have

### **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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during observing sessions)

**ORDINARY COMMITTEE MEMBERS:** 

Joe Sowerby
Dorothy Sowerby
Kevin Greally
David Anderson

Meetings

Our meetings, often with an illustrated talk by a guest speaker, are held on the first Thursday of each month (except in August) 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 2008-09

Full £25 Concessions £12.50

Subscriptions become due on 1<sup>st</sup> October. Half-price subscription is charged if joining after 1<sup>st</sup> 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 <a href="mailto:nottinghamastro@yahoo.co.uk">nottinghamastro@yahoo.co.uk</a> or speak to any NAS committee member at one of the regular monthly meetings. A membership application form is inside this issue of the Journal.