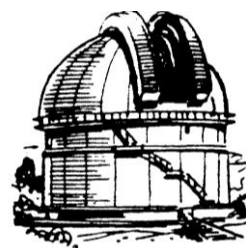


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# Journal

of the



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## Nottingham Astronomical Society

May 2009

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### Inside this issue

- Sky Notes for May
- E-services
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- Diary Dates
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- Society Information

Thursday, 7<sup>th</sup> May

at the

British Geological Survey  
Nicker Hill, Keyworth

8 pm (doors open at 7.30pm)

Tonight we welcome

**Kevin Kilburn, FRAS**

who will be speaking on

**'The Lost Gardens of Fireside:  
Where did James Nasmyth live?'**

### SUMMER IS ALMOST UPON US...

*...surely not!*...I hear someone say. It doesn't seem long since the New Year... and only a matter weeks ago we were coping with deep snow.

However, from about May 17<sup>th</sup>, at the latitude of Nottingham, Astronomical Twilight lasts the whole night through... which means that the sky never gets completely dark from then until late July. **Astronomical Twilight** is defined as that period after sunset, and before sunrise, when the Sun is less than **18 degrees** below the horizon. Under such conditions, the sky isn't completely dark, even overhead, so that magnitude 6 stars cannot be seen with the naked eye.

Astronomical Twilight differs from **Civil Twilight**, during which the Sun is less than **six degrees** below the horizon, and it is considered light enough to work outside without the aid of artificial lighting. And there is a third category of twilight, **Nautical Twilight**, during which the Sun is less than **12 degrees** below the horizon, meaning that the horizon can be distinguished at sea.

Of course, all three definitions assume ideal conditions. Actual conditions may vary, as for example, thick cloud may make it too dark for outdoor work even when the Sun is less than six degrees below the horizon; and fog might obscure the marine horizon, even in broad daylight. However, from the astronomical point of view, if your interest is in observing faint nebulae and galaxies, you have only about two or three weeks left before the "summer" sets in!

# Sky Notes

## May 2009

Compiled by Roy Gretton



### PHASES OF THE MOON

First Quarter occurs in the evening of May 1<sup>st</sup> and again on the morning of the 31<sup>st</sup>

Full Moon occurs shortly before sunrise on the 9<sup>th</sup>

Last Quarter occurs on the morning of the 17<sup>th</sup>

New Moon occurs close to midday on the 24<sup>th</sup>

### THE PLANETS

**Mercury** is not well-placed for observation this month, as it passes through inferior conjunction (between Earth and Sun) on May 18<sup>th</sup>.

**Venus** is a morning object, visible through a small telescope as a steadily-broadening crescent, low in the east before sunrise, and reaching maximum apparent brightness on May 2<sup>nd</sup>, when it will be shining at magnitude  $-4.5$ . Though brilliant, Venus will never be seen against a truly dark sky this month.

**Mars** remains a relatively faint and distant object in the morning sky, at 5 arcseconds across, too small and close to the Sun for useful observation. In the middle of May, Mars will be rising at about 4.30 a.m. BST, and will reach 10 degrees above the eastern horizon at sunrise.

**Jupiter** will gradually become better-placed for observation this month, and will be rising about 2 a.m. BST by the end of May. At magnitude  $-2$  it will be an easy naked-eye object, but remains in the constellation of Capricornus, which means that it is too low in the sky for good telescopic observation from the latitude of the British Isles.

**Saturn** continues to be well-placed for observation this month. It will be seen as a yellowish star shining at magnitude  $+0.8$  in the constellation of Leo. A modest-sized telescope will show the (nearly edge-on) rings and several of Saturn's satellites in motion around the planet.

**Uranus** is a magnitude 5.8 morning object close to the border of Aquarius and Pisces, while **Neptune** is a fainter magnitude 8 object in Capricornus. On May 27<sup>th</sup> Neptune and Jupiter will be only 23 arcminutes (less than one Moon-width) apart, providing a convenient opportunity for locating the most distant planet.

### METEORS

The best of the May meteor showers are the Eta Aquarids, associated with Halley's comet. They will be at their most active between May 3<sup>rd</sup> and 6<sup>th</sup>, producing perhaps five observable events per hour in the early morning skies on those dates. A waxing gibbous Moon may interfere with observations to some extent.

## **VARIABLE STAR: Algol**

There is just one minimum of this eclipsing binary visible from the U.K. this month. It occurs at 3.35 am BST on May 3<sup>rd</sup>. The star dims from its normal brightness (magnitude 2.1) to magnitude 3.4 over a period of 4.8 hours.

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## **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](mailto: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.*

## **Special Event at BGS, Keyworth**

The Nottingham Astronomical Society is hosting a special public astronomical evening on the 26 September, at The British Geological Survey site in Keyworth, as part of the IYA2009 celebrations.

More details will be available soon.

## DIARY DATES 2009

### Meetings of the Nottingham Astronomical Society

Our programme for the coming months 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 7 May 2009

British Geological Survey, Keyworth  
8.00pm (Doors open 7.30pm)  
Talk: **'The Lost Gardens of Fireside:  
Where did James Nasmyth live?'**  
**Kevin Kilburn FRAS**

#### Thursday 4 June 2009

British Geological Survey, Keyworth  
8.00pm (Doors open 7.30pm)  
Talk: **'The Search for Extraterrestrial Intelligence'**  
**Dr Mike Leggett FRAS**

#### Thursday 2 July 2009

British Geological Survey, Keyworth  
8.00pm (Doors open 7.30pm)  
Talk: **'Edwin Hubble'**  
**Dr Ann Bonell**

#### *August - Summer break*

#### 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)  
Topic to be confirmed

**Thursday 4 February 2010**

British Geological Survey, Keyworth  
8.00pm (Doors open 7.30pm)  
Topic to be confirmed

**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*

## Small Advertisements

### **Equipment for sale**

Celestron 1 ¼" visual back	£5
Celestron 1 ¼" star diagonal (prism)	£10
Celestron 9x50 finderscope with SCT bracket	£10
Celestron 2" star diagonal (mirror)	£20

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

### **Help wanted with precision metalwork**

I need to shorten the Losmandy extension pillar which sits between my equatorial mount and a steel pier. This entails cutting a 150 mm diameter aluminium tube and drilling 5 holes in it. Can anyone do this or recommend someone who can?

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

### **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

### **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: [j\\_aitken@hotmail.co.uk](mailto:j_aitken@hotmail.co.uk)

## 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: \_\_\_\_\_

Address including postcode: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Telephone: \_\_\_\_\_

e-mail: \_\_\_\_\_

*please tick one box*

Subscription rate:	Full	£25.00	<input type="checkbox"/>
	Concession	£12.50	<input type="checkbox"/>
	Half-year*	£12.50	<input type="checkbox"/>
	Concession half-year*	£6.25	<input type="checkbox"/>

*\*Half-year is available from 1 April to 30 September*

### **Gift Aid**

Do you pay Income Tax and/or Capital Gains Tax? If so, would you like to register for Gift Aid? Please ask the Treasurer for a Gift Aid declaration form. You need to fill it in only once. As a registered charity, the Society will get £6.25 from the taxman for each £25 subscription. You have to be a UK tax payer in order to participate in Gift Aid.

# 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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**Observatory line: 07726 940700 (line open during observing sessions)**

**ORDINARY COMMITTEE MEMBERS:**

**Joe Sowerby**

**Dorothy Sowerby**

**Kevin Greally**

**David Anderson**

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## 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.

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## 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.

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If you would like more information about the **Nottingham Astronomical Society**, or would like to become a member, please contact the Secretary [nottinghamastro@yahoo.co.uk](mailto:nottinghamastro@yahoo.co.uk) 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.

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