



# Nottingham Astronomical Society February 2006

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# Thursday February 2<sup>nd</sup> 7.45 p.m.

at the Djanogly City Academy (doors open at 7.30)

Tonight we welcome

# **Martin Lunn MBE**

who will be speaking on

# THE DISCOVERY OF PLUTO

and will have a selection of half-price astronomy books for sale

# OBSERVING ALGOL

Algol, the most celebrated dark-eclipsing binary star, located in the constellation of Perseus, is well-placed for observation on winter evenings. For most of the time the star is at its full brightness, but every 2.87 days it fades very noticeably, as the dimmer member of the binary system passes in front of the brighter one. If you have never observed an Algol minimum there are no fewer than **three** opportunities this month. The first is on **February 3<sup>rd</sup>**, at 8 p.m., the second shortly before 1 a.m. on the **21<sup>st</sup>**, and the third at twenty to ten on the evening of the **23<sup>rd</sup>**. Eclipses last about ten hours, but changes are most noticeable in the middle five hours (2½ hours either side of the minimum). No optical aid is needed: Algol varies between magnitudes 2.2 and 3.5.

Note: you can watch a nice simulation at

http://www.astronomyclub.org/obs/Algol/sim.htm

# **Sky Notes** 2006 February

**Compiled by Roy Gretton** 

All times quoted are U.T.



# PHASES OF THE MOON

First Quarter occurs just before dawn on February 5<sup>th</sup>
Full Moon occurs in the early morning of the 13<sup>th</sup>
Last Quarter occurs around dawn on the 21<sup>st</sup>
New Moon occurs just after midnight on the 28<sup>th</sup>

This month the Moon is closest to Earth on the 27<sup>th</sup>, and furthest from Earth on the 14<sup>th</sup>.

#### **LUNAR OCCULTATIONS**

The Moon will pass in front of the magnitude 5.4 star Chi Tauri on February 6<sup>th</sup>. The star will disappear behind the dark limb of the Moon at about 23h 30m on that date. On February 14<sup>th</sup> the magnitude 4.7 star Chi Leonis will reappear from occultation behind the dark limb of the Moon at about 20h 52m.

# THE PLANETS

**Mercury** is an evening object throughout February. It is best-placed for observation at the end of the month, as greatest eastern elongation occurs on the 24<sup>th</sup>. Dedicated observers, using a telescope or binoculars, may wish to attempt to observe a conjunction of Mercury with Uranus, low in the southwest, on February 14<sup>th</sup>. The closest approach of the two planets occurs at 15h 40m, when they will be less than 2 arcminutes apart. By the time the sky is dark enough to observe the planets, shortly after sunset, the separation will have widened to 8 arcminutes.

**Venus** will become a prominent object low in the southeast before dawn as this month progresses. Greatest brilliance (magnitude -4.5) will occur on the 17<sup>th</sup>.

**Mars** remains a conspicuous object in the evening sky throughout February, though all the while fading, until by the end of the month it will be a little brighter than magnitude 1. Its apparent diameter will have shrunk to only 7 arcseconds at this time.

**Jupiter** will be rising about one hour after midnight by mid-February, and will be culminating before 06 hours at this time. If you are an early riser look for a bright object about twenty degrees above the southern horizon just before the sky lightens. Jupiter will be five degrees north of the Moon on the 20<sup>th</sup>.

**Saturn** is visible for most of the night as a bright object in the constellation of Cancer. In the middle of February it will be due south at 23 hours, and about 56 degrees in elevation, so well-placed for telescopic observation. The shadow of the rings on the planet will be clearly visible. Saturn is four degrees south of the Moon on the 11<sup>th</sup>. Throughout the month the planet will be close to M44, the Beehive cluster, making a pleasing sight in wide-angle, low-power instruments.

**Uranus** and **Neptune** are almost unobservable this month, although a determined observer, with a clear south-western horizon, might be able to find Uranus, in the constellation of Aquarius, low in the southwest after sunset. (See also the notes concerning Mercury).

#### **METEORS**

There are no notable meteor showers in February.

# A NOTE FROM THE PRESIDENT

**Dear fellow NAS members**, at our meeting in December you asked your committee to establish a means of advertising observing sessions at our observatory as a matter of urgency and I am please to see a number of you have been able to arrange observing sessions with John Hurst using the e-mail and pay-as-you-go mobile phone message confirmation system your committee devised. Let's continue to make good use of the 24 inch telescope while Saturn is there to see, it is a bountiful view.

Just to keep you informed, we will be formally opening our Observatory at Cotgrave in the morning of 13<sup>th</sup> May 2006, then moving on to Cotgrave Place Golf Club for a 60<sup>th</sup> anniversary lunch. This seemed the best way of organising the two events. You will hear more about these events shortly.

On another tack, it may be possible to hold the NAS monthly meetings in the meeting rooms of the British Geological Survey located in Keyworth. While the facilities available at Keyworth would be better suited for NAS meetings and people would be near the Observatory should they wish to extend the evening with some observing, I would not want to proceed without full discussion with, and support of, the members. The club has met at the Djanogly for a long time now and I would not want to alienate people who can get there but would find it difficult to get to Keyworth. Please could you all let me or indeed any committee member know your opinions?

Fred Hopper

# **DIARY DATES 2006**

#### Meetings of the Nottingham Astronomical Society

Our programme of monthly meetings 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 activities.

# **Thursday 2 February**

Dianogly City Academy, doors open 7.30pm

# The Discovery of Pluto

Martin Lunn MBE

A selection of astronomy books will be available, brand new and at half price.

#### Thursday 2 March

Djanogly City Academy, doors open 7.30pm

# **Cosmic Collisions**

**Dennis Ashton** 

Dennis Ashton

Director, Sheffield Hallam University Star Centre

# Thursday 6 April

NAS observatory site, from 7.30pm

# **Observatory Evening**

Do please come along and help prepare the observatory for the official opening E-mail for directions: <a href="mailto:nottinghamastro@yahoo.co.uk">nottinghamastro@yahoo.co.uk</a>
(No meeting at Djanogly in April)

# Thursday 4 May

Djanogly City Academy, doors open 7.30pm

# The Galactic Centre – a hidden treasure

**Dr Susan Cartwright** 

Sheffield University

#### Saturday 13 May

Observatory site, near Cotgrave

NAS Observatory Opening Ceremony
followed by a Buffet Lunch at Cotgrave Place
Observatory to be opened by Professor Michael Merrifield
(Further details to be announced at NAS meetings)

# Thursday 1 June

Djanogly City Academy, doors open 7.30pm

# The Magnetism of Sunspots David Boyce

University of Leicester

# **DIARY DATES: Other Events**

# Take part in **PROJECT MOONWATCH**

The Institute of Physics has recently launched Moonwatch, a mass-participation experiment that aims to improve the accuracy of the lunar calendar, as well as stimulate interest in astronomy.

**No special equipment is required to take part**. Participants are asked to look for the new moon in the western sky immediately after sunset on four days of each month (the dates are listed on the Moonwatch

website). They then submit details of what they've seen to:

www.crescentmoonwatch.org where further details of the project can be found.

The data collected will be used by HM Nautical Almanac Office to improve predictions of the date of the new crescent moon. Please note that the next observation dates are from **30th January to** 

2nd February 2006.

Friday 3 and Saturday 4 February 2006 Kensington Town Hall Hornton Street, London

# **EUROPEAN ASTROFEST 2006**

Exhibition and Conference
Organised by Astronomy Now magazine
Ticket hotline:
01732 367542

Details: <a href="www.astronomynow.com/astrofest/">www.astronomynow.com/astrofest/</a>

# A new venue in Keyworth for our meetings? Please tell the committee your views!

As you will have seen in the Note from the President in this issue of the Journal, the NAS committee are considering whether the **British Geological Survey** at **Keyworth** should become a venue for the Society's monthly meetings.

Moving our meetings would be a big decision. All of us on the committee welcome the views of the Society's members on this matter. Do you prefer to keep the monthly meetings at Djanogly City Academy? Or should we hold a meeting at Keyworth and then consider whether to make it our regular meeting place?

You can speak to any committee member, or if you prefer, e-mail your views to: <a href="mailto:nottinghamastro@yahoo.co.uk">nottinghamastro@yahoo.co.uk</a>

Either way, please tell us what you think.

Many thanks,

Paul Stocks NAS Secretary

# **Small Advertisements**

# For Sale

**Maksutov 6-inch by Drew**. 2x2-inch finderscopes, equatorial tripod mount with circles, eyepiece tray, carry box. Selection of eyepieces, Barlow lens, star diagonals.

Buyer collects. £495 for prompt sale.

Telephone Peter Davison on 0115 923 0040

# For Sale

# 8¾-inch Newtonian telescope on Dobsonian mount

Built by David Lukehurst. 65x and 250x eyepieces, finderscope. 3 years old. Hardly used, very good condition.

£375 or near offer

Telephone Terry Naylor on 0115 9815968



18, LADY BAY ROAD ,Nottingham, NG2 5BJ 0115 945 5459 FAX: 0115 945 5362

WebShop: www.widescreen-centre.co.uk www.telescopes-direct.com eMail: call@widescreen-centre.co.uk

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You are always made welcome at our shop or a telephone call to Lynda will bring you our latest catalogue

# 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 <a href="mailto:nottinghamastro@yahoo.co.uk">nottinghamastro@yahoo.co.uk</a>

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

# **NAS Observatory Group**

(please tick appropriate box)

☐ Full Adult £25

☐ Junior (17 years or under) £12.50

☐ Concession (full time student, UB40, etc.) £12.50

A web group page and message service (for NAS members only) is available at <a href="http://uk.groups.yahoo.com/group/nottinghamastronomicalsociety/">http://uk.groups.yahoo.com/group/nottinghamastronomicalsociety/</a>

It is used for circulating information to members about work at the observatory and use of the large telescope. If you are a member of the Society, you can join this online group by visiting the website and clicking on "Joint this Group".

Nottingham Astronomical Society				
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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, Hon. Secretary, <b>Nottingham Astronomical Society,</b> 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				

# **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

**PRESIDENT:** 

Fred Hopper

email: fwmh@nerc.ac.uk

HONORARY VICE PRESIDENT

Alan Heath (Ex. Dir. BAA Saturn Section)

**VICE PRESIDENTS:** 

**David Lukehurst** 

e-mail: <a href="mailto:gildor@ntlworld.com">gildor@ntlworld.com</a> website: www.dobsonians.co.uk

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**DIRECTOR OF OBSERVING** 

John Hurst

**Observatory line:** 07726 940700

**CAMPAIGN FOR DARK SKIES:** 

**Duncan Collins** 

email: duncan.collins@talk21.com

**ORDINARY COMMITTEE MEMBERS:** 

Joe Sowerby Dorothy Sowerby

# **Meetings**

Formal monthly meetings, with speakers, are held on the first Thursday of each month (except August, and occasionally other months as announced) at

*Djanogly City Academy, Room 105*Sherwood Rise, Nottingham NG7

Doors open 7.30pm Meetings Start 7.45pm Meetings end 10.00pm

**Non-members** are very welcome at our meetings and there is no charge for the first meeting. We make a small charge of £2.50 adults, £1.25 juniors to non-members after their first attendance. Invited guests are admitted free of charge.

**Annual Subscriptions, 2005-06** 

Full Adult: £25
Junior (17 years or under) £12.50
Concessions £12.50

(Full time student, UB40, etc)

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 further information about the **Nottingham Astronomical Society**, or would like to become a member, please contact the Honorary Secretary, Paul Stocks, at the address given above, 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.