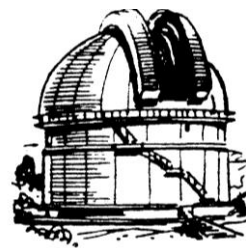

Journal

of the



Nottingham Astronomical Society

February 2010

Inside this issue

- Sky Notes for February
- NTU Open Dome event
- Diary Dates
- Lecture at Nottingham University
- E-services
- Advertisements
- Membership application form
- Society Information

Thursday, 4th February

at the

**British Geological Survey
Nicker Hill, Keyworth**

8 pm (doors open at 7.30pm)

Tonight we welcome

Dr. Daniel Brown

from the

**School of Science & Technology
Nottingham Trent University**

who will be speaking on

**'Observatories
Without Telescopes'**

IMMINENT SPACE MISSIONS

As we go "to press" this month, a number of important space missions are due to be launched in early February.

- A Soyuz rocket is scheduled to carry a Progress cargo ship to the International Space Station on February 3rd.
- The space shuttle Endeavour is scheduled to carry the Tranquillity Module and the Cupola to the International Space Station on February 7th. The Cupola is a module with seven windows designed to provide astronauts with spectacular views around the station, and of the Earth and celestial objects (an astronomer's dream!)
- NASA's Solar Dynamics Observatory is due to be launched on an Atlas 5 rocket on February 9th. The observatory will be the first mission in the "Living With A Star" programme, in which a series of spacecraft will study "Space Weather", involving the Sun and the solar wind, and their effects on all aspects of terrestrial weather.

Of course, any of these missions may be subject to delay due to technical reasons.

Sky Notes

February 2010

Compiled by Roy Gretton



PHASES OF THE MOON

Last Quarter occurs shortly before midnight on February 5th

New Moon in the early morning of the 14th

First Quarter occurs shortly after midnight on the 22nd

Full Moon occurs on the afternoon of the 28th

This month the Moon is closest to Earth on the 27th, and furthest from Earth on the 13th.

THE PLANETS

Mercury is essentially unobservable this month.

Venus is now an evening object, but still very close to the Sun and therefore practically unobservable during February. We can, however, look forward to the planet putting in a glorious appearance in the evening sky throughout the late spring and early summer.

Mars, a bright orange object in the constellation of Cancer, at an altitude of about 60 degrees at midnight, is the most favourable planet for observation this month. In early February the planet will be passing just north of the Praesepe star cluster. If you wish to study surface details through a telescope, the sooner you do it the better, as Earth and Mars are moving further apart, and by the end of February the planet's apparent diameter will have decreased from 14 to 12 seconds of arc. A modest-size instrument will easily show the white north polar ice-cap.

Jupiter reaches conjunction with the Sun on February 28th, and is therefore unobservable this month.

Saturn, in the constellation of Virgo, and brightening to magnitude +0.6, is a morning object, reaching due south at 2 a.m. by the end of February. Saturn's north pole is tilted slightly toward Earth, and so the rings appear at a very oblique angle.

Both **Uranus** and **Neptune** are unfavourably placed for observation this month.

METEORS

There are no notable meteor showers in February.

MINOR PLANET: Vesta

Vesta, the brightest of the asteroids, is at opposition to the Sun on February 18th, and very favourably-placed for UK observers. At magnitude +6 it will be on the border of naked-eye visibility, but you will certainly need the aid of binoculars or a small telescope to be able to spot it from light-polluted locations. Throughout February, Vesta will be moving through the "sickle" of Leo, north of the bright star Regulus. Between February 14th and 19th, it will be passing just south of the 2nd magnitude star Algeiba (gamma Leonis), so a possible observing

project around that time would be to plot, on paper, the movement of the asteroid relative to nearby stars. Vesta will, of course, be the one that moves! Or, if you have a camera capable of exposures lasting at least several seconds, you could attempt to image the asteroid.

VARIABLE STAR: Algol

There are **five** minima of this **eclipsing binary** visible from the UK this month. They occur on February 5th (5.50 am), the 8th (2.40 am), the 10th (11.30 pm), the 13th (8.20 pm) and the 28th (4.25 am). The star dims from its normal brightness (magnitude 2.1) to magnitude 3.4 over a period of 4.8 hours.

Nottingham Trent University 'Open Dome' Event

Date: 22 February 2010

Time: 8.00pm - 10.00pm

Event talk : *'A Parking Ticket for NASA – Our First Steps on the Lunar Property Ladder'*

Location: Clifton Campus, Nottingham Trent University

Details: The event will meet at 8.00pm in the foyer of the CELS building.

If you're looking for the ideal present for someone who already has everything, look no further! Why not buy some land on the Moon, an asteroid or even a star. It's a creative present but can you really claim ownership? If you could, you could also request a parking fee for that ugly space probe NASA crashed on YOUR property.

This month's Open Dome Event will introduce you to the new field of Space Law and the first real-life legal dispute concerning a parking ticket for NASA.

The event will begin with a talk by Daniel Brown and Flavio Inocencio, from NTU's Law School, entitled *'A Parking Ticket for NASA – Our First Steps on the Lunar Property Ladder'*. This will introduce the Outer Space Treaty and draw parallels to explorations of Antarctica and the oceans.

This will be followed by a tour of the observatory, during which visitors will have opportunities to observe the night sky using the NTU telescopes. If, due to poor weather, it is not possible to observe, a small planetarium session will be provided in the observatory dome.

Due to the limited space inside the observatory dome, booking is required. Please contact [Daniel Brown](#) to register.

For more information about the optical observatory, please visit the [observatory website](#) or contact [Daniel Brown](#).

DIARY DATES 2010

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 4th 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 4th March 2010

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

Talk: '**Observing Orion**'
Paul Money FRAS

Thursday 1st April 2010

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

Talk: '**Saturn Lord of the Rings**'
Andy Lound

Thursday 6th May 2010

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

Talk: '**Astrophotography with a DSLR Camera**'

Dr Roy Gretton
NAS Vice President

Thursday 3rd June 2010

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

Talk: '**Is there or has there been Life on Mars?**'

Prof. Mark Sims
Physics and Astronomy Department
University of Leicester

Thursday 1st July 2010
British Geological Survey, Keyworth
8.00pm (Doors open 7.30pm)

Members Evening, with short talks by members of the NAS, including

**"After the Space Shuttle, What's Next? -
NASA's plans for the future of human spaceflight"
Paul Stocks**

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 University February Public Lecture

"The Violent Lives of Galaxies"

Dr. Meghan Gray

Thursday, **18th February**, 6-7pm.
Lecture theatre B1
Maths and Physics Building
University Park Campus
Nottingham
NG7 2RD

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.

Small Advertisements

BIG CLEAR-OUT

I need to dispose of some Tele Vue, Losmandy, Meade and Celestron telescopes and other equipment. For a full detailed list, please contact Sam Boote:

0115 937 4644

s.boote@bcs.org

www.sboote.demon.co.uk/astro

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

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

NAS Membership application 2009/10

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"/>
	Joint rate for partners living		
	at the same address: whole year	£37.50	<input type="checkbox"/>
	half year*	£18.75	<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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John Hurst

email: jmhurst@hotmail.co.uk

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

**CAMPAIGN FOR DARK SKIES
REPRESENTATIVE:**

Barrie Chacksfield

email: b.chacksfield@bgs.ac.uk

ORDINARY COMMITTEE MEMBERS:

Joe Sowerby

Dorothy Sowerby

Kevin Greally

David Anderson

Julie Morledge

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 2009/10

Full	£25
Concessions	£12.50
Joint rate for partners living at the same address	£37.50

Subscriptions become due on 1st 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 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.

The Nottingham Astronomical Society

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