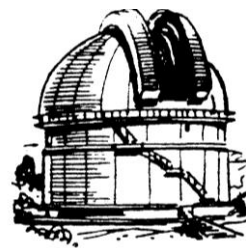

Journal

of the



Nottingham Astronomical Society

March 2011

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Thursday, March 3rd

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

Tonight we welcome
Andrew Lound

who will deliver a dramatic lecture
entitled

“A Jupiter Odyssey”

Supplying the International Space Station

America, Russia, Japan and the European Space Agency are all playing their part in keeping the ISS supplied with equipment and essential services. As I complete this edition of the Journal, the space shuttle Discovery is docked at the station, and the six visiting astronauts are working on their hectic schedule.

The second of at least five ESA cargo ships (called Automated Transfer Vehicles) was launched on February 16th by an Ariane 5 rocket from the Guiana Space Centre. The spacecraft travelled over eight days and 2.5 million miles to catch up with the space station, with which it docked on the morning of February 24th, delivering fresh equipment, rocket fuel and oxygen. The Automated Transfer Vehicle will be the largest supply ship for the space station after the shuttle fleet is retired later this year. The ATV, however, is not reusable, but is designed to burn up on re-entry to Earth's atmosphere.

Meanwhile, Japan's H-2 Transfer Vehicle has been delivering cargo to the ISS, and smaller Russian Progress freighters continue to come and go.

Sky Notes

March 2011

Compiled by Roy Gretton



The **VERNAL EQUINOX**, when the Sun on its northward journey crosses the celestial equator, occurs on March 20th.

BRITISH SUMMER TIME is due to begin on March 27th. Clocks should be advanced by one hour at 1 a.m. on that date. (01.00 hr **UT** will become 2 a.m. **BST**).

PHASES OF THE MOON

New Moon occurs on March 4th at 8.45 pm
First Quarter occurs on the 12th at 11.45 pm
Full Moon occurs on the 19th at 6.10 pm
Last Quarter occurs on the 26th at 12.07 pm

This month the Moon is closest to Earth on the 19th, and furthest from Earth on the 6th. Perigee coincides with Full Moon, which will therefore look particularly large.

THE PLANETS

March provides an excellent opportunity for observing **Mercury** in the evening sky. It will begin to be visible after March 7th, and will reach its highest elevation (10 degrees) on the 22nd, after which it will soon disappear from view. March 16th will provide an interesting visual opportunity, as Mercury (magnitude – 1) will pass just over two degrees north of Jupiter (magnitude –2). Look due west after sunset from a location with a low western skyline.

Venus is a morning object, very difficult to observe due to its low elevation and proximity to the Sun.

Mars is essentially unobservable this month.

Jupiter is rapidly sinking into the sunset glow as March progresses, and will no longer be visible by the end of the month.

Saturn, a glorious gem in the constellation of Virgo, will be rising in the early evening in March, and will be due south shortly after midnight by the end of the month. It is definitely the planet of choice for telescopic observers.

Uranus and **Neptune** are unobservable this month.

METEORS

You may catch sight of a few **Virginids** toward the end of March. They tend to be slow moving meteors.

VARIABLE STAR: Algol (Beta Persei)

There are five minima of this eclipsing binary visible from the UK this month. They occur on March 5th (1.50 am **UT**), the 7th (11.35 pm), the 25th (3.30 am), the 28th (1.20 am **BST**) and the 30th (10.05 pm). The star dims from its normal brightness (magnitude 2.1) to magnitude 3.4 over a period of 4.8 hours.

Did we really land on the Moon?

A lecture by

Dr Martin Hendry

School of Physics and Astronomy, University of Glasgow

Wednesday 9 March 2011, 5pm

NEWLT2 Lecture Theatre

Newton Building, Nottingham Trent University

All are welcome; admission to this event is free.

More than 40 years after Apollo 11 there are a surprising number of theories around – in books, documentary programmes and the internet – that Neil Armstrong's famous "One small step" was an elaborate hoax, filmed in secret here on Earth. Conspiracy theorists point to a range of "evidence" to support their claim – including waving flags, strange shadows, no stars in the sky and deadly solar radiation. In this talk, using real Apollo video footage and a series of simple demonstrations, Dr Martin Hendry takes a closer look at the science behind "moon hoax" claims, and asks whether we really did land on the Moon.

For further details, see

http://www.nottingham.ac.uk/~ppzaa/physics_centre_index.html,

or contact the secretary:

Prof A. Aragón-Salamanca Tel. 0115 9516230

School of Physics and Astronomy

University of Nottingham

E-mail: Alfonso.Aragon@Nottingham.ac.uk

Nottingham NG7 2RD

DIARY DATES 2011

Monthly Meetings of the Nottingham Astronomical Society

Our programme for this year is shown below. Don't forget to check our website:

www.nottinghamastro.org.uk

for the latest information about the Society's meetings and for further details about the talks and speakers.

Our meetings are held on the **FIRST THURSDAY** of the month, at the British Geological Survey, Keyworth, Notts. NG12 5GG
Doors open at 7:30pm for 8pm start.

Thursday, 3rd March 2011

Dramatic lecture : **“ A Jupiter Odyssey ”**

Andrew Lound

Thursday, 7th April 2011

Talk: **“ Backyard Telescopes and Observatories ”**

Dr Roy Gretton

Vice President, Nottingham Astronomical Society.

Thursday, 5th May 2011

Talk: **“ Genesis – The Birth of a Star ”**

Paul Money FRAS

Thursday, 2nd June 2011

Talk: **“ Herschel - Seeing the Stolen Starlight ”**
(what the Herschel Space Telescope is showing us about the hidden side of the Universe)

Dr Loretta Dunne

School of Physics and Astronomy
University of Nottingham

Thursday, 7th July 2011

Talk: **“ Gamma Ray Bursts – A Cosmic Detective Story ”**

Dr Andrew J. Norton

Department of Physics and Astronomy
The Open University

August 2011 - Summer Break - No Meeting
<p>Thursday, 1st September</p> <p>Members' Evening (visitors welcome) - Topics to be arranged</p>
<p>Thursday 6th October</p> <p>Talk: “ Journey to the Aurora of Jupiter ” The 2018 NASA/ESA Double Mission to the Jupiter System</p> <p>Dr Nigel Bannister Department of Physics and Astronomy University of Leicester</p>
<p>Thursday 3rd November 2011</p> <p>2011 Annual General Meeting</p>
<p>Thursday 1st December 2011</p> <p>Dramatic Lecture : “ Fire from the Sky - the Tunguska Incident ”</p> <p>Andrew Lound</p>

Public astronomy lecture at the University of Nottingham

**"Substructure and Streams in the Milky Way:
Unravelling Galaxy Formation"**

Date: Thursday March 24th 2011

Time: 6-7 pm

Speaker: Dr. Hanni Lux

Venue: Maths & Physics Building (B1)
University Park Campus
Nottingham

**Nottingham Trent University Open Dome Event -
"What's that? - Gone in the blink of an eye"**

Date: 24 March 2011

Time: 8pm - 10pm

Event: Open Dome Event - What's that? - Gone in the blink of an eye

Location: CELS and Optical observatory, Clifton campus

Details:

If everything changes around us, the stars above seem to be constant and everlasting. But we couldn't be further from the truth. Change is an integral part the universe - from exploding stars to asteroids. There is almost no part of the cosmos where observing and studying how things change is not essential if we are to really understand what is going on.

The event will start at 8pm in CEL 015 with a talk on Exploring the Dynamic Universe by Dr A. Newsam (Liverpool JMU). In this talk, he will describe how a new generation of Robotic Telescopes are opening up this exciting new view on the universe and how the UK leads the world in this area.

Afterwards, visitors will be introduced to what is visible in the evening's sky, followed by a tour of the NTU observatory. They will have the chance to see interesting objects in the spring sky with the observatory's 20 and 14 inch telescope, small telescopes, and binoculars (if the weather allows it). If the weather is not good, a small planetarium session will be offered in the observatory pointing out objects of interest.

Booking is required for this event. Please contact [Daniel Brown](#) to register.

For further information about the optical observatory, please visit [the observatory website](#).

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 website:

www.nottinghamastro.org.uk

NAS Journal e-mailing list

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

info@nottinghamastro.org.uk

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

Small Advertisements

Telescope for sale

Meade 2080 8-inch f/10 Schmidt-Cassegrain with field tripod and wedge. Reflex sight, 6mm, 12.5mm, 25mm and 32mm eyepieces, 2X Barlow, 0.4X telecompressor, two 90° erecting prisms; 45° roof prism. All in excellent condition in fitted trunk/case. Offers to 0115 937 6333 or rockvision@btinternet.com (Keyworth)

Mike Sumbler

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.

£20

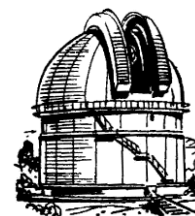
Email the Editor: roygretton@hotmail.co.uk

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

NOTTINGHAM ASTRONOMICAL SOCIETY

Founded in 1946 for all interested in astronomy
Affiliated to the British Astronomical Association
Member of the Federation of Astronomical Societies

Registered Charity No. 1066645
Member of the Society for Popular Astronomy
Supporter of the Campaign for Dark Skies



Membership application and Gift Aid declaration

Title:

Full name:

Full home address:

Postcode:

Telephone:

e-mail address:

Subscription rate:	Full	£25.00	(year)	£12.50	(half year)
	Concession	£12.50		£6.25	
	Partnership	£37.50		£18.75	

Concession = under-18 / full-time student / unemployed and receiving benefits
Partnership = two members living together as a couple at the same address

I wish my subscriptions to be eligible for Gift Aid **Yes / No**

Gift Aid declaration

(HMRC reference XR32048)

I want Nottingham Astronomical Society to treat all subscriptions and donations that I make from the date of this declaration as Gift Aid donations, until I notify you otherwise.

I pay an amount of UK Income Tax and/or Capital Gains Tax at least equal to the tax that Nottingham Astronomical Society reclaims on my donations in the appropriate tax year.

Signature:

Date:

Nottingham Astronomical Society

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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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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 2011

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

Subscriptions become due on 1st January. Half-price subscription is charged if joining after 1st July. 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 info@nottinghamastro.org.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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