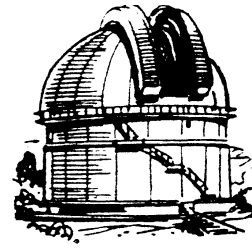

Journal

of the



Nottingham Astronomical Society

February 2012

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Thursday, 2nd February

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

Tonight we are holding a
MEMBERS' EVENING
(visitors welcome)

which will include a
MEMBERS' OPEN FORUM
and an
ASTRO QUIZ

PROGRESS ON THE JAMES WEBB SPACE TELESCOPE

NASA's ambitious plans to replace the Hubble Space Telescope with an instrument having seven times the aperture of its predecessor remain alive, despite America's need to reduce its budget deficit.

Some work on the instrument will be accelerated this year to keep the 9 billion dollar observatory on schedule for launch in late 2018. The telescope program will be receiving \$530 million funding this year, substantially more than the \$375 million budget proposed by the White House. The American Congress agreed to increase the funding after a spending committee last July drew up a budget that would have seen the programme cancelled.

During the next three years, a complex system consisting of 18 hexagonal primary mirror segments totalling 21.3 feet across will be assembled. The primary mirror, along with secondary, tertiary and fine steering mirrors, will be mounted on a support structure with folded wings and booms that must deploy and function perfectly in the harsh conditions of space.

However, there is still anxiety among senior officials that major tests in the next few years could uncover unforeseen problems that might drive up the cost of the mission even further.

Sky Notes

January 2012

Compiled by Roy Gretton



PHASES OF THE MOON

Full Moon occurs on February 7th

Last Quarter occurs on the 14th

New Moon occurs on the 21st

(So, usually, the Moon doesn't reach First Quarter during the whole of this month)

This month the Moon is closest to the Earth on the 11th, and furthest from the Earth on the 27th.

THE PLANETS

Mercury begins the month very close to the Sun in the morning sky, passes through superior conjunction on February 7th, and emerges as an evening object visible very low in the west after sunset in the last week of the month.

Venus appears as a brilliant white “star” in the west almost as soon as the Sun has set. By the end of February it will be 44 degrees from the Sun, and shining at magnitude -4.1 . Through a telescope the planet will be exhibiting a waning gibbous phase throughout the month.

Mars is increasing in brightness and is now a very noticeable reddish “star” close to the border of Leo and Virgo. By the end of February it will be almost at its best for this apparition, with its angular diameter approaching 14 arcseconds, and its magnitude -1 .

Jupiter continues to be an excellent target for observation, with prominent surface features and the constant movements of the four Galilean satellites easily seen through modest-sized telescopes. It is, however, diminishing in brightness and angular size, and at the end of the month will be setting well before midnight. By then, Venus will have replaced Jupiter as the eye-grabbing object in the evening sky, as the two planets move closer together in the southwest.

Saturn is a morning object, a few degrees from Spica in the constellation of Virgo. By the end of February it will be rising at 10 pm. The plane of the ring system is now tilted at an angle of 15 degrees when viewed from Earth, making the planet a beautiful object when observed through a telescope. Its largest satellite, Titan, will be due north of the planet on the evening of February 7th, and again on the evening of the 23rd.

Uranus and **Neptune** are now barely observable in the evening sky.

METEORS

February is a particularly sparse part of the year for “organised” meteor activity, with no major showers visible for the whole of the month.

DIARY DATES 2012

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 information about the talks and speakers.

Our meetings are held on the **1st THURSDAY** of the month, at the British Geological Survey, Keyworth, Notts. NG12 5GG

Doors open at 7:30pm for 8pm start.

Thursday, 2nd February 2012

Members' Evening (Visitors welcome)

Members' Open Forum and an **Astro Quiz**.

Thursday, 1st March 2012

Talk: **"Parallel Universes"**

Dr Antonio Padilla
School of Physics and Astronomy
Nottingham University

Thursday, 5th April 2012

Dramatic Lecture : **" A Starry Night to Remember – Astronomy and the Titanic"**
(100th Anniversary – April 1912)

Andrew Lound

Thursday, 3rd May 2012

Talk: (Title to be announced)

Thursday, 7th June 2012

Talk: (Title to be announced)

Thursday, 5th July 2012

Talk: **"Exodus – The Death of Stars "**

Paul Money

August 2012 - Summer Break - No Meeting
Thursday, 6th September 2012 Members' Evening (visitors welcome) - Topics to be arranged
Thursday 4th October 2012 Talk: (Title to be announced)
Thursday 1st November 2012 2012 Annual General Meeting
Thursday 6th December 2012 Talk: “ Climate Change and the Sun-Earth Connection ” Dr Jim Wild Space Plasma Environment and Radio Science Group Lancaster University

The Nottingham Astronomical Society: E - SERVICES

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

secretary@nottinghamastro.org.uk

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

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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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 2012

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

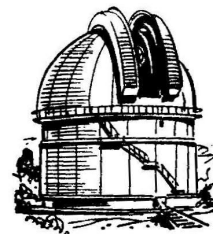
Subscriptions become due on 1st January. Half-price subscription is charged if joining after 1st July. Please make cheques payable to: Nottingham Astronomical Society.

If you would like more information about the **Nottingham Astronomical Society**, or would like to become a member, please contact the Secretary secretary@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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NOTTINGHAM ASTRONOMICAL SOCIETY



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Affiliated to the British Astronomical Association
Member of the Federation of Astronomical Societies

Registered Charity No. 1066645
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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: