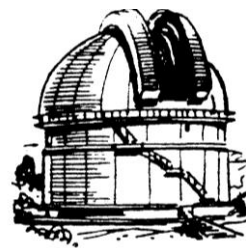

Journal

of the



Nottingham Astronomical Society

November 2011

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Thursday, November 3rd

British Geological Survey

Nicker Hill, Keyworth

8 pm (doors open at 7.30pm)

Tonight we hold our

Annual General Meeting of 2011

*All members of the Society are
encouraged to attend*

RELIEF FOR ASTRONAUTS ABOARD THE ISS

A cargo ship designated Progress-45, bound for the ISS, was successfully launched from the Baikonur Cosmodrome in Kazakhstan at 4:11 p.m. local time on Sunday, October 30th.

If this flight had failed, the space station would have had to be left unmanned for the first time since continuous occupation began over 10 years ago, which would have heightened the risk to the survival of the station in the event of a major breakdown, with no human presence to take remedial action.

This launch of the Soyuz rocket booster (which is employed for both the Progress cargo missions and the Soyuz manned capsules) was the first since the failure of the third stage of the Progress-44 cargo mission that crashed in Siberia on August 24th. This led to the temporary grounding of manned flights.

Progress-45 was due to dock automatically with the ISS at the Pirs Docking Compartment on November 2nd, delivering nearly three tons of essential supplies to the station. If all goes according to plan, a Soyuz mission in December will restore the space station crew size to six, and normal crew rotations will resume. After the retirement of the US Space Shuttle, the Russian Soyuz vehicles are the only means of crewing the ISS.

Sky Notes

November 2011

Compiled by Roy Gretton



PHASES OF THE MOON

First Quarter occurs on November 2nd
Full Moon occurs on the 10th
Last Quarter occurs on the 18th
New Moon occurs on the 25th

This month the Moon is closest to the Earth on the 23rd, and furthest from the Earth on the 8th.

THE PLANETS

Mercury reaches greatest eastern elongation on November 14th, and will therefore be an evening object. It will, however, be very difficult to observe from the UK, due to its southerly declination (about -25 degrees).

Venus, likewise an evening object, and much brighter than Mercury, will nevertheless be a challenging object to observe, again because of its southerly location (about 24 degrees south of the celestial equator).

Mars, a morning object, is gradually becoming easier to observe. At the beginning of November it will be rising at about midnight, and as the month progresses will become more prominent in the constellation of Leo.



Position of Mars in Leo
on 22nd November

Jupiter, having just passed opposition to the Sun in the constellation of Aries, is the most prominent object in the night sky, other than the Moon. It begins November with an apparent diameter of almost 50 arcseconds, and ends the month slightly less than 48 arcseconds across. It is thus excellently placed for telescopic observation in mid-to-late evening throughout November.

Saturn is unobservable this month.

Uranus begins November well placed for observation in the evening sky. It can be found about a degree north of the celestial equator in the constellation of Pisces.

Neptune is an evening object in the constellation of Aquarius, but at magnitude 7.8 it is much fainter than Uranus, and more difficult to observe due to its lower altitude.

METEORS

The Leonids are November's most prominent meteor shower, although activity has been decreasing over recent years, and perhaps only 20 observable events per hour can be expected this year. The maximum occurs on the morning of November 18th.

COMET GARRADD

Comet 2009 P1 (Garradd) continues to be visible in the evening sky. It is moving northward in the constellation of Hercules (southwest in the early evening), and its brightness is magnitude 7.9. It is currently twice as far from the Sun as is the Earth.

The Editor's latest image of the comet, taken on October 14th, is shown below. The total exposure time was 12.5 minutes at the prime focus of a 30cm Newtonian reflector.



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.

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 November 2011

2011 Annual General Meeting

Thursday 1st December 2011

Dramatic Lecture : **“ Fire from the Sky - the Tunguska Incident ”**

Andrew Lound

Nottingham Trent University Open Dome Event - " Bang goes the Star – Supernovae and the expanding Universe" by Dr P James (ARI – JMU Liverpool)

Date: 30 November 2011

Time: 8.00pm - 10.00pm

Event: Open Dome Event – Bang goes the Star – Supernovae and the expanding Universe

Location: CELS and Optical observatory, Clifton campus

Details:

Supernovae are the hot topic at the moment. Not only has there been a very bright supernova in a close galaxy visible with only binoculars, but the recent Nobel prize for physics was given for research involving Supernovae as well. But what is so special about them?

Dr P James (ARI – JMU Liverpool) will explain in his talk SNIa supernovae and the accelerating expansion of the Universe how astronomers explore the furthest reaches of the Universe and its future. He will also present his exciting new data from the recent supernova in M101 allowing us to understand these amazing probes of our Universe. This talk will be followed a brief introduction on what is visible in this month's sky. Afterwards, visitors will get a tour of the NTU observatory and the chance to see interesting objects in the autumn sky with the observatory's telescopes, 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](#).

Public astronomy lecture at the University of Nottingham

"Galaxy Formation and Transformation"

Date: Thursday 24th November 2011

Time: 6-7 pm

Speaker: Alfonso Aragon-Salamanca

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

NO TICKETS REQUIRED

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

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

e-mail: fred.w.m.hopper@googlemail.com

VICE PRESIDENT:

Roy Gretton

e-mail: roygretton@hotmail.co.uk

SECRETARY:

Victoria Jolly

e-mail: secretary@nottinghamastro.org.uk

TREASURER:

Sam Boote

e-mail: s.boote@bcs.org

JOURNAL EDITOR:

Roy Gretton

e-mail: roygretton@hotmail.co.uk

OBSERVATORY DIRECTOR:

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

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 |

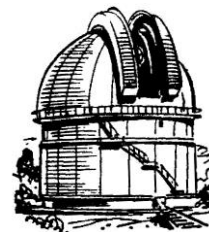
Subscriptions become due on 1st January. Half-price subscription is charged if joining after 1st July. Please make cheques payable to: Nottingham Astronomical Society.

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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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

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Full name:

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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: