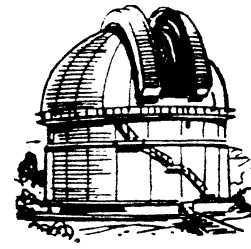

Journal

of the

Nottingham Astronomical Society
October 2013



Inside this issue

- Sky Notes for October
- NAS e-Services
- Diary Dates for 2013
- Advertisement
- Society Information
- Membership application form

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

Tonight we will welcome
the renowned British astro-imager

Nik Szymanek

who will be speaking on

**“Astrophotography – and How
It’s Done”**

RECENT NEWS STORIES ON THE WEB

Follow these links for interesting current news:

APEX Zooms in on Cat’s Paw Nebula

Astronomers using ArTeMiS, a new instrument installed on the Atacama Pathfinder Experiment - a 12-m diameter telescope in the Atacama Desert, have captured a spectacularly detailed view of the star formation region NGC 6334, also known as the Cat’s Paw Nebula or Bear Claw Nebula.

PSR J1824-2452I: Missing Link between Radio and X-Ray Pulsars

A team of astronomers led by Dr Alessandro Papitto from the Institute of Space Studies of Barcelona has discovered a fast-spinning pulsar that switches between emitting X-rays and emitting radio waves.

Hubble Finds Largest Population of Globular Clusters in Abell 1689

Sep 25, 2013 by Sci-News.com

New, deep observations of the massive galaxy cluster Abell 1689 have revealed that it hosts the largest population of globular clusters ever found.

RECENT NEWS STORIES ON THE WEB - CONTINUED

[The Sky At Night faces the axe one year after Sir Patrick Moore's death](#)

The **Sky At Night** could be withdrawn by the BBC by the end of the year, a decision which has sparked anger and concern among viewers.

You can sign a petition against this here:

[Petition | The BBC: Please do not axe The Sky At Night | Change.org](#)

[Supermassive Black Hole at Milky Way's Center Erupted Two Million Years Ago](#)

Astronomers led by Prof Joss Bland-Hawthorn from the University of Sydney have found evidence that the supermassive black hole at the heart of our galaxy,...

[M60-UCD1: Densest Galaxy in Nearby Universe](#)

Astronomers using NASA's Hubble Space Telescope, Chandra X-ray Observatory and ground-based optical telescopes have discovered what they say is the densest galaxy in the nearby Universe.

[Comet ISON 2013:](#)

On Oct 1st, Comet ISON will pass by Mars at a distance of just 6.7m miles. Image generated using Solar System Scope here:

pic.twitter.com/5xQ9Muwq82

[NASA's Hubble Space Telescope Snaps Comet](#)

On the opposite side of the Sun at around 378 million miles away from Earth, Comet ISON is hurtling towards the centre of our Solar System at over 50,000 miles per hour.

LADEE mission update:

Sept. 27, 2013: The LADEE spacecraft is past apogee - the point when it is farthest from Earth - and is headed back toward Earth for a final fly-by on Tuesday, Oct 1, 2013. The last perigee maneuver - when the spacecraft was closest to Earth - was perfect, so no maneuver will be needed during the fly-by. The mission operations team at NASA's Ames Research Center in Moffett Field, Calif., performed a test of LADEE's medium gain antenna for the first time, and everything looks good. This antenna will be used to transmit science data to the ground, once LADEE arrives in lunar orbit.

Further updates will be available here: [Ames Research Center](#)

Sky Notes

October 2013

Compiled by Roy Gretton



British Summer Time ends on Sunday, October 27th. Clocks should be turned back by one hour at 2 am on that date.

PHASES OF THE MOON (*all times given are BST*)

New Moon	1:35 am on October 5 th
First Quarter	12:02 am on October 12 th
Full Moon	12:38 am on October 19 th
Last Quarter	12:40 am on October 27 th

This month the Moon is closest to the Earth on the 10th, and furthest on the 25th.

(Data from the BAA Handbook)

THE PLANETS

Mercury spends the whole of October as an evening object, but extremely difficult to observe. Greatest eastern elongation occurs on the 9th, when Mercury will be 25 degrees from the Sun, but very low down in the west after sunset.

Venus is also an evening object, moving away from the Sun as it approaches greatest eastern elongation on the first day of November. Although at magnitude -4.2 it will be much brighter than Mercury, it will not be very favourably placed for observation, being about 25 degrees south of the equator. Late November to mid-December will be a better period for seeing Venus.

Mars is a morning object in the constellation of Leo, rising at about 2:30 am in mid-October. As the planet presents a disk less than 5 arcseconds across, little surface detail will be accessible, even with large amateur telescopes.



Looking east at 4 am
on October 20th

Jupiter will be rising about an hour before midnight by mid-October, and will be an unmistakable object above the eastern horizon, shining at magnitude -2.2 in the constellation

of Gemini. By the end of the month its equatorial diameter will exceed 40 arcseconds, making it an excellent subject for telescopic observation.



Looking east at 1 am
on October 16th

Saturn is unobservable this month.

Uranus reaches opposition to the Sun on October 3rd, when its apparent diameter will be 3.7 seconds of arc, and its brightness will be magnitude 5.7. It is in the constellation of Pisces, close to the border of Cetus, just over 3 degrees north of the celestial equator.

Neptune, magnitude +7.9, is an evening object in the constellation of Aquarius, about 11 degrees south of the celestial equator.

METEORS

The **Orionids** are the main meteor shower that turns up in October. This year conditions are unfavourable, as peak activity is expected only a few days after Full Moon.

The Nottingham Astronomical Society: E - SERVICES

Whether or not you are a NAS member, you can keep up to date with details of the Society's meetings and other events by visiting the NAS website:

www.nottinghamastro.org.uk

NAS on Facebook

You are welcome to connect with other members and friends of the NAS on Facebook by going to:

<http://www.facebook.com/nas.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 2013

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 **FIRST THURSDAY** of the month,

at the British Geological Survey, Keyworth, Notts. NG12 5GG

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

Thursday 3rd October 2013

Talk: **“ Astrophotography – and How It's Done ”**

Nik Szymanek

The British amateur astronomer and prolific astrophotographer

Thursday 7th November 2013

2013 Annual General Meeting

Thursday 5th December 2013

Dramatic Lecture : “ Into the Cosmic Ocean ”

The dream of travel to the stars

Andrew Lound

Andy is a popular public presenter and UK Coordinator for the Planetary Society

Nottingham Trent University Open Dome Event -

"Open Dome Event - Goethe, Colours and Green Stars - The Phenomena of Colour "

Date: Wednesday 30 October 2013

Time: 8 - 10 pm

Details:

Can we really never see green stars? Colours and how they are perceived by an observer in astronomy in light of Goethe's phenomenology of colours is presented by Dr H Liang (NTU).

Location: CELS and Optical observatory,

Clifton campus

Clifton Lane

Nottingham

NG11 8NS

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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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CAMPAIGN FOR DARK SKIES

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Barrie Chacksfield

e-mail: b.chacksfield@gmail.com

ORDINARY COMMITTEE MEMBERS:

Kevin Greally

David Anderson

Victoria Jolly

Phil Heesom

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 2013

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

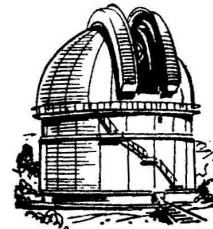
Subscriptions become due on 1st January. Half-price subscription is charged if joining after 1st July. Please make cheques payable to: Nottingham Astronomical Society.

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

The Nottingham Astronomical Society, and/or the Editor accept no responsibility for any errors that may occur within this publication. Any views expressed in the **NAS Journal** are those of the individual authors and not necessarily endorsed by the Nottingham Astronomical Society, its Committee or Members.

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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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: