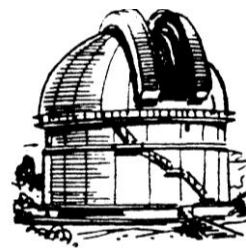

Journal

of the



Nottingham Astronomical Society

April 2013

Inside this issue

- Sky Notes for April
- NAS e-Services
- Diary Dates for 2013
- NTU Open Dome event
- Advertisements
- Society Information
- Membership application form

Thursday, 4th April
British Geological Survey
Nicker Hill, Keyworth
8 pm (doors open at 7.30pm)

Tonight we welcome
Dr Paul Abel

of the University of Leicester
and the BBC *Sky at Night* programme
who will be speaking on

**“Visual Observing –
How to Observe and
Record”**

RECENT NEWS STORIES ON THE WEB

Follow these links for interesting current news:

- Mars Curiosity Rover is now back on track after computer problems were solved <http://www.astronomynow.com/news/n1303/19safemode/>
- Recent images of Comet PanSTARRS
<http://www.space.com/20205-comet-pan-starrs-moon-amazing-photos.html>
- The latest results on the Cosmic Microwave Background from the Planck spacecraft
<http://www.astronomynow.com/news/n1303/21planck/>
- Pair of brown dwarfs discovered only 6.5 light-years from our Sun
<http://www.astronomynow.com/news/n1303/13browndwarfs/>
- Comet to pass very close to Mars next year
<http://www.astronomynow.com/news/n1303/05sidingspring/>
- The Sun is predicted to roar back into life this year
<http://news.yahoo.com/slumbering-sun-wake-134357020.html>

Sky Notes

April 2013

Compiled by Roy Gretton



All times given below are in **British Summer Time (BST)**

PHASES OF THE MOON

Last Quarter	3 rd April, 5:37
New Moon	10 th April, 10:35
First Quarter	18 th April, 13:31
Full Moon	25 th April, 20:57

This month the Moon is closest to the Earth on the 27th, and furthest on the 15th.

(Data from the BAA Handbook)

THE PLANETS

Mercury begins April as a morning object shining at magnitude +0.5, about 27 degrees from the Sun. To spot the planet you will need a location with an unobstructed southeastern horizon, as Mercury will be very low down in the pre-dawn glow.

Venus is unobservable this month.

Mars reaches conjunction with the Sun on April 18th, and so is unobservable this month.

Jupiter, still the brightest object in the heavens apart from the Sun and Moon, is now past its best during the present apparition. Moving slowly eastward through the constellation of Taurus, the planet will have faded to magnitude -1.9 by the end of April, when it will be less than 10 degrees above the western horizon as twilight ends. By then it will be nearly 6 astronomical units from Earth.

Saturn is about to take over from Jupiter as the most prominent planet in the midnight sky, as it reaches opposition to the Sun on April 28th, when it will be shining at magnitude +0.1 in the constellation of Libra. The tilt of the rings is over 18 degrees, giving us a good view of their northern face, and a modest-sized telescope will reveal the shadow of the planet on the rings. Titan, Saturn's largest satellite, will be due north of the planet on April 13th, and again on the 29th.



Saturn:

the view looking southeast
at 11 pm on April 19th

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

METEORS

The Lyrids are the notable meteor shower of April, reaching their maximum activity on the 22nd, which is only three days before Full Moon. Observing conditions this year are therefore very unfavourable.

VARIABLE STAR: Algol

There are **three** minima of this **eclipsing binary** visible from the UK this month. They occur on April 2nd (23:10), the 20th (04:05), and on the 23rd (00:55). The star dims from its normal brightness (magnitude 2.1) magnitude 3.4 over a period of 4.8 hours, and then returns to its normal brightness in a similar length of time.

COMET 2011 L4 (PanSTARRS) begins April at an approximate magnitude of +5, making it theoretically a naked eye object from a dark-sky site, but realistically you will need the aid of binoculars in order to find it. It begins April in the constellation of Andromeda, and on the 4th will be passing close by M31 (the Great Andromeda Galaxy). Continuing northward, the comet will be passing through the 'W' of Cassiopeia in the third week on the month, but fading all the while.

Consult <http://www.ast.cam.ac.uk/~jds/1114.ukl> for detailed night-by-night predictions, and <http://www.astronomy.com/panstarrs> for a finder chart.

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, 4th April 2013

Talk: “ **Visual Observing – How to Observe and Record** ”

Paul Abel

University of Leicester and Sky at Night Co-Presenter.

Thursday, 2nd May 2013

Talk: “ **Telescopes and Technology in the 21st Century** ”

Dr. Ken Elliott

Elliott Automation Ltd

Thursday, 6th June 2013

Talk : “ **Exploring Jupiter's Icy Moons – the next ESA Mission to Jupiter** ”

Dr. Emma Bunce

University of Leicester

Thursday, 4th July 2013

Talk: “ **Matter Between the Stars -
the Physics and Chemistry of the Interstellar Medium** ”

Dr Paul Ruffle

Jodrell Bank Centre for Astrophysics – University of Manchester

August 2013 - Summer Break - No Meeting

<p>Thursday, 5th September 2013</p> <p>Members' Evening (visitors welcome)</p> <p>A short talk by one of our members, followed by an Astro Quiz.</p>	
Talk:	<p>Thursday 3rd October 2013</p> <p>“ Astrophotography – and How It’s Done ”</p> <p>Nik Szymanek</p> <p>The British amateur astronomer and prolific astrophotographer</p>
<p>Thursday 7th November 2013</p> <p>2013 Annual General Meeting</p>	
Dramatic Lecture :	<p>Thursday 5th December 2013</p> <p>“ Into the Cosmic Ocean ”</p> <p>The dream of travel to the stars</p> <p>Andrew Lound</p> <p>Andy is a popular public presenter and UK Coordinator for the Planetary Society</p>

Nottingham Trent University Open Dome Event
"What is Dark Matter?"

Date: 30 April 2013

Time: 8.00 pm - 10.00 pm

Event: Open Dome Event – What is Dark Matter?

Location: CELS then Optical observatory, Clifton campus

Details:

Most of the matter in the universe seems to be missing. Astronomers call this Dark Matter. But what actually is this invisible material that only makes itself apparent through gravity.

Dr. C. Castleton (NTU) will give an overview of our current understanding of what particles could contribute to Dark Matter. This talk will be followed by 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 spring 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.

ADVERTISEMENTS

FOR SALE

Skywatcher Evostar 120 Refractor on EQ5 Mount

Almost new. Motor drives to both axes with hand controller
Heavy duty metal tripod. 50mm right-angle finder. 2" star-diagonal.
Two eyepieces plus solar filter (using Baader Solar Film)
£450

Beacon Hill 12-inch f/5.5 Newtonian Tube Assembly

Used but in good working order. Mirrors by Nichol Optical. Coatings in good condition.
Includes finderscope and primary mirror cover. Tube clamps for equatorial mount also
available if wanted.
£300

Phone David on: 0115 9602266 or e-mail: david_lukehurst@o2.co.uk

FOR SALE

- **Orion** (USA) 6x26 correct image **finderscope**, complete with bracket **£15**
- **Telescope Optics Book** by Rutten and van Venrooij (hardback), in excellent condition
£12

Contact BARRY WINSTON

Home tel no 0115 989 4239 mobile no. 07507 863 689.

Email barrywinston@yahoo.com

WANTED: Eyepieces

I am currently looking for 2nd hand Televue eyepieces to compliment my TV 101.

I am looking for mainly Nagler eyepieces but would be interested in other models in the Televue too.

I am situated close to Alfreton, Derbyshire. Thank you.

Paul Davies

Email: paul@graphic.demon.co.uk

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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email: 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

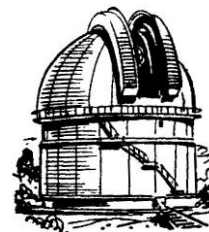
Subscriptions become due on 1st January. Half-price subscription is charged if joining after 1st July. Please make cheques payable to: Nottingham Astronomical Society.

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



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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

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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)

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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.

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