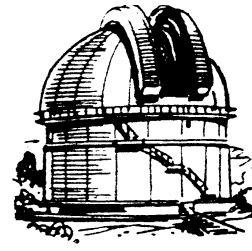

Journal

of the



Nottingham Astronomical Society

April 2012

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Thursday, 5th April

British Geological Survey

Nicker Hill, Keyworth

8 pm (doors open at 7.30pm)

Tonight we look forward to a dramatic
lecture from

Andrew Lound

entitled

**“ A Starry Night to Remember –
Astronomy and the Titanic”**

SPRING GALAXY SPOTTING

April is an excellent month for observing galaxies from the northern hemisphere, as a large area of sky, well away from our own Milky Way and rich in galaxy clusters, is in full view. This year the best opportunities come in the second half of the month, when moonlight will be absent from our evening sky. Once we get into May, observing deep-sky objects becomes increasingly difficult, as the period of true darkness diminishes and eventually becomes non-existent until late July. Some Messier targets, all brighter than magnitude 9, that you may wish to track down this month are listed below.

Canes Venatici: M51 (mag.8.4), M63 (8.6), M94 (8.5), M106 (8.4)

Ursa Major: M81 (mag.7.8), M101 (7.9)

Virgo: M49 (mag.8.4), M60 (8.8), M64 (8.5), M86 (8.9), M87 (8.6)

On a mid-April late evening, Ursa Major and Canes Venatici are almost overhead, so if using binoculars you will find a deck chair or lounger a great help as you peer upwards. Meanwhile, Virgo is almost due south but much lower down, so you may find that the light from the fainter galaxies is swamped by artificial lighting.

Sky Notes

April 2012

Compiled by Roy Gretton



PHASES OF THE MOON

Full Moon occurs on April 6th
Last Quarter occurs on the 13th
New Moon occurs on the 21st
First Quarter occurs on the 29th

This month the Moon is closest to the Earth on the 7th, and furthest from the Earth on the 22nd.

THE PLANETS

Mercury is a morning object this month, reaching greatest western elongation on April 18th. However, it will be very poorly placed for observation from the UK, being very close to the eastern horizon, even at sunrise.

Venus, shining at magnitude -4.3 , will be at its very best in early April, beginning the month 46 degrees from the Sun. Through a telescope the planet will appear as a brilliant white crescent, with a diminishing phase but a steadily increasing diameter, which will reach 37 arcseconds by the end of the month. On April 3rd the planet will cross the Pleiades star cluster, a potentially beautiful sight through binoculars or a small telescope.



The Moon and Venus imaged by the Editor on March 26th, using a 55mm focal length lens

Mars begins the month with an apparent diameter of 12.5 arcseconds, but as the Earth (on its tighter orbit) races ahead of Mars, the distance between the two planets will increase rapidly, and by the close of April the Martian diameter will have diminished to only 10 arcseconds. So if you have a telescope it is worth making the best of any observing opportunities, as we shall have to wait another two years before Mars is as close again. For naked eye observers, Mars is that bright orange “star” moving westward (retrograde motion) through the constellation of Leo at the beginning of April, and then turning eastward again in the second half of the month.

Jupiter, having provided us with glorious observing opportunities throughout the autumn and winter, is now far past its best as it sinks rapidly into the sunset glow. Although still shining at magnitude -2 , by the end of April will be setting less than an hour after the Sun, as it heads toward conjunction in May.

Saturn, on the opposite side of the sky to Jupiter, reaches opposition on April 15th, and so will be visible throughout the hours of darkness, although never very high in the sky when viewed from the UK. Saturn can be seen as an off-white magnitude 0.2 “star” a few degrees

east of Spica in the constellation of Virgo. The largest satellite, Titan, will be due north of the planet on April 11th, and again on the 27th.

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

METEORS

This year the **Lyrids** arrive with near-perfect timing, as their maximum activity on the night of April 21st-22nd is very close to New Moon. This is not usually a very prolific shower, typically providing about ten events per hour, but from time to time it puts on a fine display, as happened in 1982.

COMET GARRADD C/2009P1

This is still the brightest comet around, but it is fading (from about magnitude 8) as April begins. During the month it will move from Ursa Major into Lynx. The best advice for finding the comet on a night-to-night basis is to consult the Heavens Above website at <http://www.heavens-above.com>

The Editor's latest images of Garradd were obtained on March 27th, when the comet was almost overhead, a few degrees west of the Plough, at a distance of 135 million miles from Earth. Notice the movement of the comet over a period of 11 minutes.



2012 March 27, 20:40 UT



2012 March 27, 20:51 UT

Each image, with an exposure time of 30 seconds, is approximately 15 arcminutes across.

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 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 **FIRST THURSDAY** of the month, at the British Geological Survey, Keyworth, Notts. NG12 5GG

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

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

Nottingham Trent University Open Dome Event

"The Beauty of a Thousand Stars"

Date: 30 April 2012

Time: 8.00pm - 10.00pm

Event: Open Dome Event - The Beauty of a Thousand Stars

Location: CELS and Optical observatory, Clifton campus

Details:

The world of stars is full of constellations: mythical creatures and heavenly heroes. Looking into star maps makes the stars come alive. Before stars were mapped in a clinical way and maps could be downloaded, a star atlas was a master piece and treasured. The stunning 18th Century Flamsteed Star Atlas developed by the first astronomer royal is one such example.

Derby Museum and Art Gallery is hosting an exhibition inspired by astronomy and featuring objects from the museum collections depicting moons, stars and other celestial imagery. This includes plates from the Flamsteed Atlas exhibited for the first time. A. Southwell (DDAS) will give us an insight into this amazing exhibition and the first astronomer royal in his presentation on “The Beauty of a Thousand Stars”.

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.

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

SUPERNOVA IN M95

M95 is a barred spiral galaxy, about 33 million light-years distant, in the constellation of Leo. Paolo Fagotti, an Italian astronomer, reported the discovery of a supernova in this galaxy on March 16th. The Editor imaged M95, under hazy conditions, on March 24th. Comparison with a previous image of the same galaxy (taken in February 2011) allows the supernova to be identified.



2011 February 3



2012 March 24

< supernova

My thanks to Kevin Greally for alerting me to this event.

Advertisement

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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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 2012

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

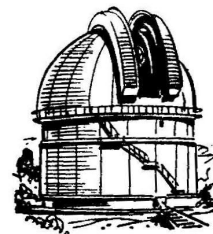
Subscriptions become due on 1st January. Half-price subscription is charged if joining after 1st July. Please make cheques payable to: Nottingham Astronomical Society.

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

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

Title:

Full name:

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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.

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