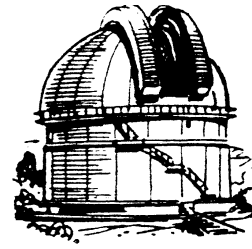

Journal

of the



Nottingham Astronomical Society

May 2012

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Thursday, May 3rd
British Geological Survey
Nicker Hill, Keyworth
8 pm (doors open at 7.30pm)

This evening we welcome
Josh Barker
of the **National Space Centre, Leicester**
who will be speaking on

**“Near Earth Objects:
What are they and why do we
care?”**

MIDSUMMER OBSERVING

At the latitude of Nottingham, no part of the sky is completely dark between May 17th and July 26th, because the Sun is always less than 18 degrees below the horizon throughout this period. This year, moonlight will be obtrusive in the evening sky for the first eleven days of May, so the window for observing *faint* deep sky objects in the evening this month is restricted to (roughly) the 12th to the 16th!

But don't be put off altogether. There are some brighter deep sky objects that are observable throughout the summer, and a few of these are listed below.

M3 (*Messier 3*): a glorious globular cluster in the constellation of Canes Venatici, which is almost overhead in the late evening in May. Best viewed through a telescope.
(See recent image on Page 4).

The double star **24 Comae Berenices**: a striking combination of an orange star and a blue star 20 arcseconds apart, high in the south in the late evening. Binoculars or a small telescope are required to appreciate this object.

Melotte 111 is the large triangular star cluster from which the constellation of Coma Berenices (*Berenices' Hair*) derives its name. It is visible to the naked eye, and is particularly beautiful when viewed through binoculars. Again, look high in the south in the late evening.

Sky Notes

May 2012

Compiled by Roy Gretton



PHASES OF THE MOON

Full Moon occurs on May 6th
Last Quarter occurs on the 12th
New Moon occurs on the 20th
First Quarter occurs on the 28th

This month the Moon is closest to the Earth on the 6th, and furthest from the Earth on the 22nd. As perigee this month coincides with the date of the Full Moon, the Moon will look particularly **LARGE** as it rises on May 5th and 6th.

THE PLANETS

Mercury is unobservable this month.

Venus, that brilliant “star” which has dominated our evening sky since late last year, will fade away from view this month as it closes in on the Sun for the transit due on June 6th. It begins May nearly 40 degrees from the Sun and is still a spectacular sight, shining at magnitude -4.4 . Through a small telescope the planet appears as a bright white crescent, about 40 arcseconds in diameter.

Mars is the orange magnitude zero “star” in the constellation of Leo. Its apparent diameter will be decreasing from 10 arcseconds at the beginning of May to barely 8 arcseconds by the close of the month, so observing any detail of the surface of the planet will become increasingly difficult.

Jupiter reaches conjunction with the Sun on May 13th, and is thus unobservable this month. (We can, however, look forward to the coming autumn, when Jupiter will be high up in the constellation of Taurus, and better placed for observation from the UK than at any time in this past decade).

Saturn will be the principal planet on view this month, once Venus has taken her leave of the evening sky. Saturn is the 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 May 13th, and again on the 29th.

Uranus (in the constellation of Pisces) and **Neptune** (in the constellation of Aquarius) are morning objects, but very difficult to observe this month.

METEORS

May, with its lack of true darkness for much of the night, is a challenging month for observing meteors. The **Eta Aquariids**, which may produce 40 events per hour, are difficult to observe from the UK, and this year their maximum activity (on the 6th) coincides with the Full Moon!

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, 3rd May 2012

Talk: "Near Earth Objects: What are they and why do we care?"

**Josh Barker
National Space Centre**

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 Venus Transit"

Date: 31 May 2012

Time: 4 pm - 6 pm

Event: Open Dome Event – The Venus Transit

Location: CELS and Optical observatory, Clifton campus

Details:

Since Copernicus, Kepler and Newton we have a good idea how our solar system looks like and all of our planets move. But we could only express our ideas in a unit that we were unsure of: the astronomical unit.

To determine the astronomical unit or the average radius of the Earth's orbit we sent expeditions into the furthest corners of our world to observe a rare phenomenon of the Venus transit. Dr D Brown (NTU) will talk about what this actually is, how it was used in the past and present. But also how you can observe this safely yourself at home, since the next opportunity will be in 2117. The event will start at 4pm at the NTU observatory where visitors will get a tour of the NTU observatory and the chance to see the Sun with the observatory's solar scope or small telescopes 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.

At 5 pm we will continue to CEL 015 for the talk on the Venus transit.

Booking is required for this event. Please contact [Daniel Brown](#) to register.

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

The GLOBULAR CLUSTER M3

Imaged by the Editor on 2012 April 15
using a Canon 450D camera
at the prime focus of a
30cm f/5.3 Newtonian reflector.
Total exposure time 20.5 minutes at
ISO400.

(See also Page 1)

The estimated distance of this cluster is
33,000 light-years.



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.

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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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 2012

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

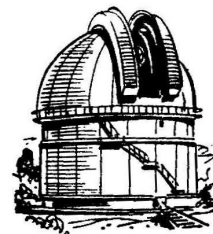
Subscriptions become due on 1st January. Half-price subscription is charged if joining after 1st July. Please make cheques payable to: Nottingham Astronomical Society.

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

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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: