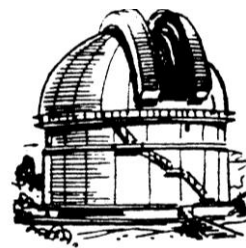


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# Journal

of the



## Nottingham Astronomical Society

May 2014

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Inside this issue

- Sky Notes for May
- Diary Dates
- NAS e-Services
- Society Information
- Membership application form

Thursday, May 1<sup>st</sup>

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

Tonight we welcome

**Dr Sarah Casewell**

who will be speaking on

**White Dwarf Stars**

**Make the best of the next couple of weeks**  
*(particularly if you are a deep sky observer)*

At the latitude of Nottingham, no part of the sky is completely dark between May 17<sup>th</sup> and July 26<sup>th</sup>, because the Sun is less than 18 degrees below the horizon throughout this period. Put another way, astronomical twilight persists throughout the night. This year, Full Moon occurs on May 14<sup>th</sup>, so I reckon that the window for observing *faint* deep sky objects ends on about the 10<sup>th</sup>!

That said, there are some brighter deep sky objects that are observable throughout the summer, for example

**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.

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. Look high in the south in the late evening.

And, of course, we may be treated to displays of **noctilucent clouds** at any time from late May to late July.

# Sky Notes

## May 2014

Compiled by Roy Gretton

*All times are given in British Summer Time*



### PHASES OF THE MOON

|               |                                 |
|---------------|---------------------------------|
| First Quarter | 4:15 am on May 7 <sup>th</sup>  |
| Full Moon     | 8:16 pm on May 14 <sup>th</sup> |
| Last Quarter  | 2 pm on May 21 <sup>st</sup>    |
| New Moon      | 7:40 pm on May 28 <sup>th</sup> |

This month the Moon is closest to the Earth on the 18<sup>th</sup>, and furthest on the 6<sup>th</sup>.

### THE PLANETS

The second half of this month sees the best evening apparition of **Mercury** during 2014, with greatest eastern elongation occurring on May 25<sup>th</sup>. On this date the planet will have an elevation of 10 degrees above the WNW horizon when the Sun is 6 degrees below the horizon.

**Venus** is a morning object throughout May, its elongation from the Sun slowly decreasing from 43 degrees at the start of the month to 37 degrees by the end. It begins the month shining at magnitude  $-4.0$ , but fades slightly thereafter.

Although opposition occurred last month, the beginning of May is still an excellent time for observing **Mars**, with the angular diameter of the planet more than 15 arcseconds (greater than it will be for over two years). It will spend the whole of May in the constellation of Virgo, an orange “star” slowly fading from magnitude  $-1.1$  to  $-0.6$  as the month progresses.

The current apparition of **Jupiter** is now beginning to draw to a close as it heads toward conjunction with the Sun in July. By the end of May its angular diameter will have diminished to 33 arcseconds, and its brightness to magnitude  $-1.9$ .

May is the best month of 2014 for observing **Saturn**, as the gas giant, in the constellation of Libra, reaches opposition to the Sun on the 10<sup>th</sup>. It will be shining at magnitude  $+0.1$ , with the planet’s equatorial diameter reaching 18.7 arcseconds, and the diameter of the ring system reaching 42.4 arcseconds. With the rings tilted at nearly 23 degrees to our line of sight, the northern hemisphere of the planet will be exposed. Saturn’s largest and brightest satellite, Titan, will be due north of the planet on May 1<sup>st</sup> and again on the 17<sup>th</sup>.



Looking SSW at midnight  
on May 17<sup>th</sup>

**Uranus**, in the constellation of Pisces, is unobservable this month, while **Neptune** is a morning object in the constellation of Aquarius, rising at about 2 am at the close of May.

## **METEORS**

May is not normally a very promising time for observing meteors from the UK, with a few showers with southern radiants (Aquarids, Scorpids, Ophiuchids) active during the month. There is, however, the outside chance of a spectacular event on May 24<sup>th</sup>, when the **Camelopardalids** (meteors appearing to radiate from the direction of Camelopardalis, a circumpolar constellation) could put in an appearance. Look toward the north once the sky is nearly dark (which won't be until quite late). Conditions will be favourable, with no interference from moonlight.

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## **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](http://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](mailto:secretary@nottinghamastro.org.uk)

You don't have to be a Society member to take advantage of this service.

## DIARY DATES 2014

### **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](http://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 1<sup>st</sup> May 2014**

**White Dwarf Stars**

**Dr Sarah Casewell**

**Thursday 5<sup>th</sup> June**

**Practical Radio Astronomy for Amateurs**

**Paul Hyde**

**Thursday 3<sup>rd</sup> July**

**Phoenix from the Ashes – the Origin of the Chemical Elements**

**Prof Mike Edmunds**

**Thursday 7<sup>th</sup> August**

**Summer Break - No meeting**

**Thursday 4<sup>th</sup> September**

**Members' Evening – Non-members welcome – Topics to be arranged**

**Thursday 2<sup>nd</sup> October**

**The Latest on the Sun**

**Dr Lucie Green**

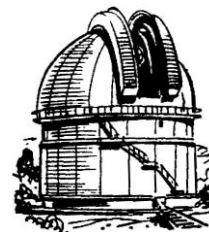
**Thursday 6<sup>th</sup> November**

**2014 Annual General Meeting**

**Thursday 4<sup>th</sup> December**

**Into the Cosmic Ocean  
*The Dream of Travel to the Stars***

# 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:**

**Full home address:**

**Postcode:**

**Telephone:**

**e-mail address:**

|                           |             |        |        |        |             |
|---------------------------|-------------|--------|--------|--------|-------------|
| <b>Subscription rate:</b> | 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:**