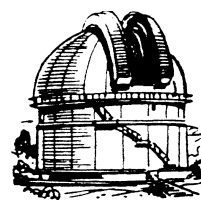

Journal

of the

Nottingham Astronomical Society

April 2019



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Thursday, April 4th

**Gotham Memorial Hall
Gotham, NG11 0HE**

8 pm (doors open at 7 pm)

**Tonight we welcome
Dr Nicholas Walton**
of the University of Cambridge

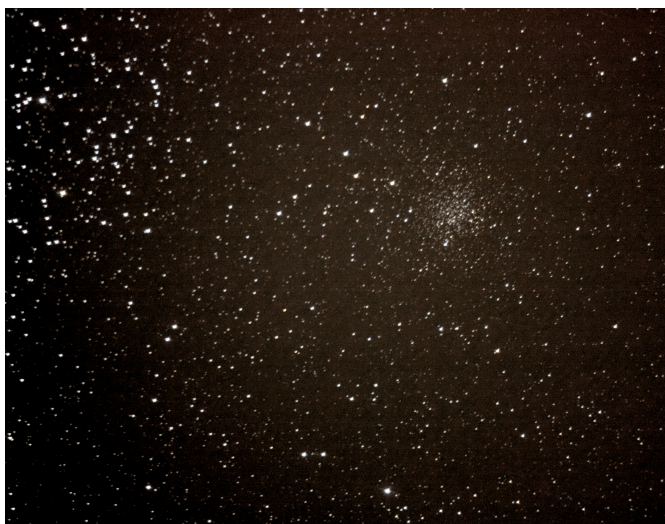


who will be speaking on

Gaia's Galactic Survey

NGC 2158

When you first come across **NGC 2158** in the constellation of Gemini, you could take it to be a *globular* cluster, but it is in fact an *open* cluster, close to the much more prominent cluster **M35**. The latter is about 3000 light-years distant, while NGC 2158 (total magnitude 8.6) is about four times as far away, hence the relative faintness of its stars.



NGC2158 (centre-right) with part of M35 in the upper left of the image

Imaged by the Editor
using a Canon 450D
at the prime focus of
a 30-cm reflector

Total exposure 14
minutes at ISO1600

Sky Notes

April 2019

Compiled by Roy Gretton

All times given below are in British Summer Time



PHASES OF THE MOON

<i>Phase</i>	<i>Date</i>
New Moon	April 5 th
First Quarter	April 12 th
Full Moon	April 19 th
Last Quarter	April 26 th

This month the Moon is closest to Earth on the 16th and furthest on the 1st.

THE PLANETS

Mercury spends the whole of April as a morning object, passing through greatest western elongation on the 11th (28 degrees, almost ten degrees greater than the greatest elongation we had in February) but, as is usual in the spring, this is *not* a favourable apparition for observers in the northern hemisphere, due to the shallow angle that the ecliptic makes with the eastern horizon in the morning sky. So most of the time Mercury will be rising barely half an hour before the Sun, and hence will be extremely difficult to observe.

Venus is likewise a morning object, always rising less than an hour before the Sun, hence it is becoming much less prominent, in spite of remaining close to magnitude -4 .

Mars continues in the slow, declining tail of its present apparition, as the Earth leaves it further and further behind. Its angular diameter is now little more than 4 arcseconds, and its magnitude $+1.6$. Even so, it remains easy to spot in the evening sky, being some 23 degrees north of the celestial equator in the constellation of Taurus. It begins April close to the Pleiades, and passes between them and the Hyades during the first week of the month.

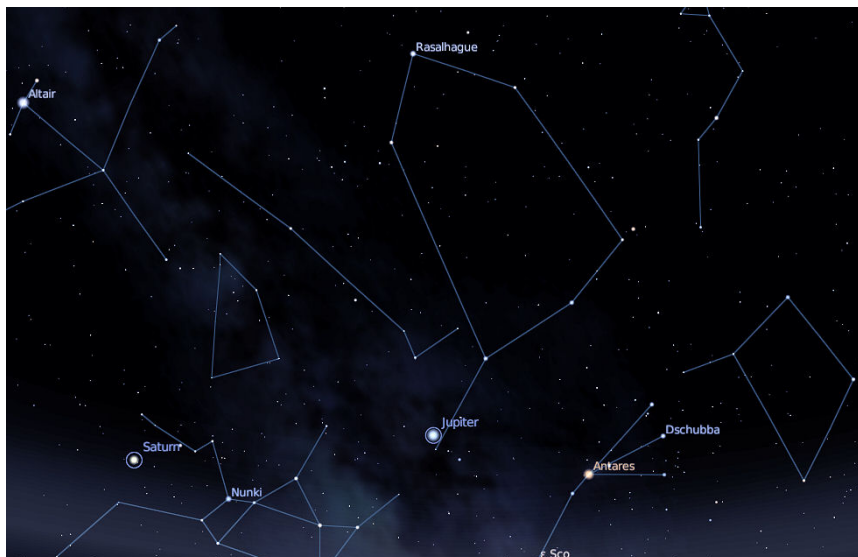


Looking west
at 10:15pm
on April 1st

*with Mars close
to the Pleiades*

Jupiter, now nearly 23 degrees south of the equator in the constellation of Ophiuchus, rises just after midnight at the end of April. Shining at magnitude -2.4 , it will be by far the brightest “star” in this part of the sky.

Saturn, shining at magnitude -2.5 and moving very slowly eastward in the southern constellation of Sagittarius, rises at about 2 am at the close of April. On the afternoon of the 25th, the Moon will pass less than half a degree south of Saturn (which will actually be occulted when viewed from Australia).



**Looking south
at 3:30am on
April 29th**

Uranus disappears into the sunset glow this month.

Neptune, now a morning object, is too close to the Sun to be observed this month.

METEORS

This is not a good year for observing the Lyrids, as their maximum activity occurs on April 22nd, with a bright gibbous Moon on hand to spoil the view.

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 on Twitter

The Society has a Twitter account at <https://twitter.com/NottinghamAstro>

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.

If you happen to change your email address, please remember to inform the Society by emailing us at treasurer@nottinghamastro.org.uk

DIARY DATES 2019

Monthly Meetings of the Nottingham Astronomical Society

1. Meetings at Gotham Memorial Hall

Nottingham Road, Gotham, NG11 0HE

Held on the **FIRST Thursday** of each month except **August**

Doors open at 7pm for 8pm start.

*These events are normally centred around a talk by a visiting speaker, except Open Evenings, when NAS members provide the activities. Normally we have a **Library** and a **Helpdesk** open at each meeting.*

<u>Date</u>	<u>Topic</u>	<u>Speaker</u>
April 4 th	Gaia's Galactic Survey	Dr Nicholas Walton University of Cambridge
May 2 nd	It's About Time <i>Time's Arrow and Time Travel</i>	Prof Ian Morison University of Manchester
June 6 th	From Tycho to Newton <i>Foundations of modern astronomy</i>	Dr Allan Chapman FRAS
July 4 th	Metal Detecting <i>What are metals to astronomers?</i>	Dr Julian Onions University of Nottingham
August 3 rd (Saturday)	Annual Barbecue at the Observatory <i>(Members and their guests only)</i>	
September 5 th	Where Are the Aliens? <i>Might we be alone?</i>	Prof Brad Gibson University of Hull
October 3 rd	The 200 at 70 <i>The Hale Telescope</i>	Dr Steve Barrett University of Liverpool
November 7 th	Annual General Meeting with a Wine and Cheese Social	
December 5 th	Voyages to the Sun <i>Probing our nearest star</i>	Prof Lucie Green University College London

2. Social and Practical Astronomy Meetings at the Burnside Memorial Hall, Plumtree

Church Hill, Plumtree, Nottingham, NG12 5ND

Held on the **THIRD Thursday** of each month from **7:30pm**

These meetings are of a more informal nature, providing opportunity for members and guests to share their hobby over a cup of tea or coffee, as well as listening to a short talk.

The next meeting will be on April 18th (see further details below)

Social and Practical Astronomy, Plumtree

The March meeting showcased a range of *Astronomy Gadgets* used by Nottingham Astronomical Society members to aid their visual and/ or imaging. Nine different gadgets were demonstrated during the evening, with members describing what the benefits of the gadget are, a practical demonstration of how they work and how it enhances their observations/ images. Items ranged from high tech, to the home made with Barrie providing an entertaining demonstration of a light shroud used to shield the observers' eyes when using a solar scope. David Buxton brought along his home made wooden telescope which was a very unique item. Approximate prices of each gadget are listed below, along with the name on the member who brought in the gadget.

- Illuminated crosshair reticule – James Dawson - £25.00
- Artificial star collimation aid – Sam Boote - £52.00
- Light Shroud – Barrie Chacksfield - Home-made
- Celestron NexYZ – Rob Bush - £39.00
- Skywatcher Wi-Fi module – Gareth Davies - £53.00
- ProCamera app – Richard Severn - £5.99
- Bino Viewers – John Hurst - £125 to £1,479
- Click Lock – James Dawson - £58
- Wooden telescope – David Buxton - Home-made from salvaged parts



Next month's Social and Practical Astronomy meeting at Plumtree is on **Thursday 18th April**. Doors open at 7:30pm for refreshments and the event will start at 8pm. All welcome including non-members. We will have a brief talk and demonstration about binoculars and then hold a binocular and telescope surgery. If you would like to bring along any pieces of kit for advice and help from members please feel free to do so.

Hope to see you all on 18th April

Regards

Richard Severn

helpdesk@nottinghamastro.org.uk

ADVERTISEMENTS

For Sale

1. 9.25" Celestron SCT with Starbright XLT coatings. Includes:

Antares F6.3 focal reducer
Antares 2" tube with twist grip
Celestron 1.25" star diagonal
Celestron 1.25" Visual back.
Celestron 9x50 R.A.C.I. illuminated finderscope.
Feather Touch focuser
JMI electrical focuser attachment for feather touch.
Telrad base
Vixen mounting bar, (has been on Skywatcher HEQ5Pro.)
Extra mounting bar on top.
AstroZap flexiheat Dew shield and controller.
Bahtninov mask.

£700 for tube and accessories.

2. SkyWatcher 200PDS Newtonian Reflector. Includes:

Finderscope
Telrad base
Dew Shield
Skywatcher motor drive, can be easily connected / disconnected
from Dual speed Crayford with turn of allen key.
GSL 35mm extension tube.

£200 for tube and accessories.

Genuine reason for sale, need to rationalise to more manageable set up.

Contact **Pete Hill** on 01283716285 or peter_j_hill@hotmail.com

Eyepieces for sale

All have been looked after and come with end caps but no boxes. All are 1.25-inch push-fit.

William Optics SPL 6mm. Retails [new](#) for £79. Price £40.



Celestron X-Cel LX 12mm. Retails [new](#) for £80. Price £40.



Sky Watcher Sky Panorama 15mm. Retails [new](#) for £80. Price £40.



TAL 2x Barlow. No longer manufactured; commonly sell for £50. Price £30.



Please contact **James Dawson** on the NAS Helpdesk: helpdesk@nottinghamastro.org.uk

Nottingham Astronomical Society

Affiliated to the **British Astronomical Association**
Member of the **Federation of Astronomical Societies**
Supporters of the **Commission for Dark Skies**

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Observatory line: 07726 940700 (line open during observing sessions)

Meetings

Our formal meetings, often with an illustrated talk by a guest speaker, are held on the first Thursday of each month (except in August) at:

Gotham Memorial Hall

Gotham

Nottingham NG11 0HE

Doors open 7.00pm

Meetings start 8.00pm

Meetings end 10.00pm

These meetings are open to the public, and visitors are welcome to attend.

Annual subscriptions 2019

Full	£30
Joint rate for partners living at the same address	£45
Under-18s and full-time students	£5

Subscriptions become due on 1st January. Half-price subscription is charged if joining after 30th June (minimum subscription £5).

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

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