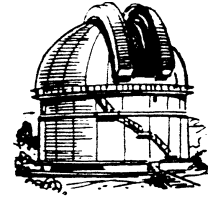

Journal

of the

Nottingham Astronomical Society

September 2019



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Thursday, 5th September

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

8 pm (doors open at 7 pm)

Tonight we welcome

Prof Brad Gibson



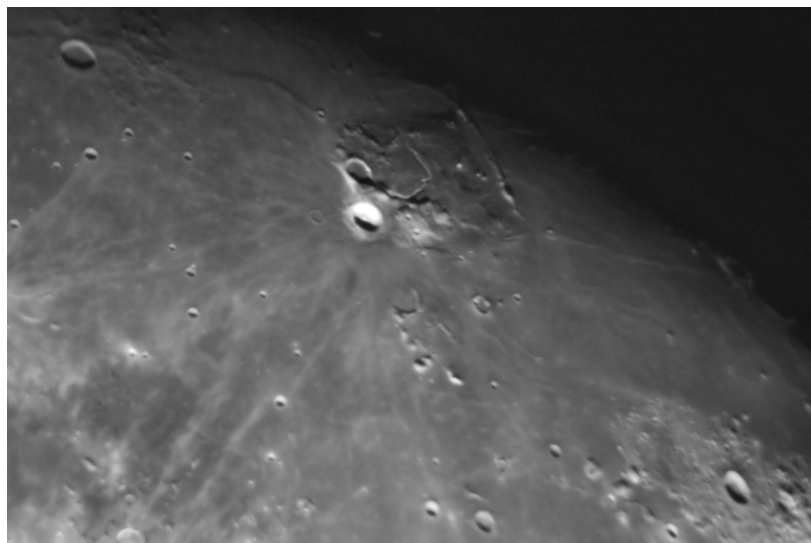
of the University of Hull

who will be speaking on

Where Are the Aliens?

Might we be alone?

The region of the Moon with craters Marinus, Aristarchus & Krieger



imaged by the Editor by eyepiece projection using a 30-cm reflector and Canon 450D

Sky Notes

September 2019

Compiled by Roy Gretton

All times given below are in British Summer Time



The **Southward Equinox** (autumnal equinox in the northern hemisphere) occurs on the morning of September 23rd. The Sun will be exactly over the equator at 8:51am on that date.

PHASES OF THE MOON

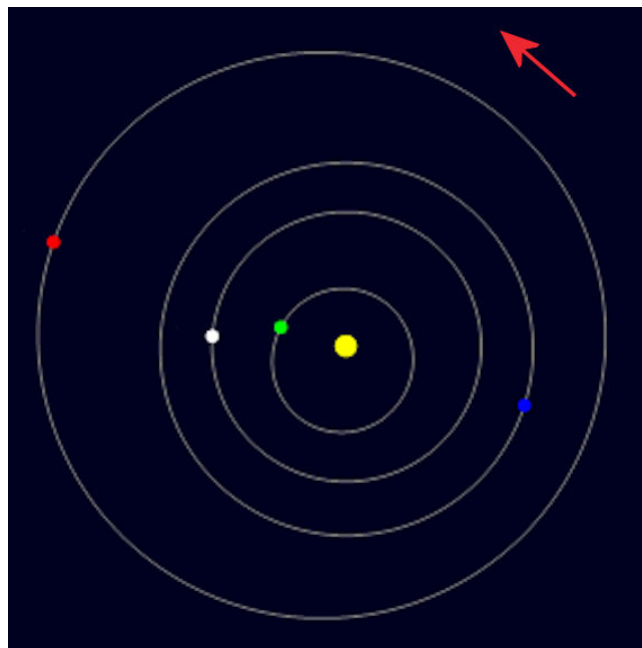
<i>Phase</i>	<i>Date</i>
First Quarter	September 6 th
Full Moon	September 14 th
Last Quarter	September 22 nd
New Moon	September 28 th

This month the Moon is closest to Earth on the 28th, and furthest on the 13th.

THE PLANETS

The inner Solar System viewed from above the north pole on 4th September 2019
(the red arrow indicates the direction of rotation)

Notice that 4 of the 5 bodies are almost in a straight line



Mercury [shown as the **green dot**] is on exactly the opposite side of the Sun from **Earth** [**blue dot**] and thus is at superior conjunction. *Venus* [white dot] passed through superior conjunction last month, and is beginning to emerge into the evening sky.

Mars [**red dot**] passed through conjunction just 2 days ago, on September 2nd, and will therefore be unobservable this month.

Mercury must be regarded as unobservable for northern hemisphere observers this month, since after passing through superior conjunction on the 2nd it emerges into the evening sky, where the ecliptic makes a very shallow angle with the horizon in autumn.

Venus (magnitude -3.9) should become visible very low down in the western evening sky toward the end of September.

Mars reaches conjunction with the Sun on September 2nd, thereafter becoming a morning object. By the end of the month it will be about 9 degrees west of the Sun (but at magnitude $+1.8$ it will be very difficult to spot!)

Jupiter, shining at magnitude -2.1 in the constellation of Ophiuchus, is becoming less prominent in the evening sky, and by the end of September will be visible for barely 2 hours before setting in the southwest.



**Looking SSW
at 9pm on
September 1st**

Saturn begins September moving in a retrograde direction (toward the west), but resumes its normal eastward travel on the 18th. It follows the much brighter Jupiter across the evening sky, both gas giants being more than 22 degrees south of the celestial equator.

Uranus, about 13 degrees north of the celestial equator in the constellation of Aries, is still a magnitude 5.8 morning object, not reaching opposition to the Sun until next month.

Neptune, shining at magnitude 7.8 (and therefore only about one-sixth as bright as Uranus), reaches opposition in the constellation of Aquarius on September 10th, when it will be about 6 degrees south of the celestial equator.

METEORS

September isn't a great month for meteor showers, although there is usually a feeble "drizzle" of meteors close to the plane of the ecliptic at this time of year.

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>
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 September 19th (see further details below)

Other forthcoming events for the amateur astronomer:

Friday 6 th September	BAA weekend Meeting , Armagh, Northern Ireland
Saturday 14 th September	FAS Convention , Cambridge
Thursday 19 th September	Open Dome, Lining up the Sun , Clifton
Sunday 29 th September	Asteroids & Remote Planets Section Meeting , Hampshire
Saturday 12 th October	BAA Observers' Workshop - Solar, Aurora & NLC, and Deep Sky, Scotland
Saturday 26 th October	BAA Back to Basics Workshop , Rickmansworth
Saturday 26 th October	SPA Meeting , London
Saturday 26 th October	Society for the History of Astronomy Autumn Conference , Birmingham
Saturday 26 th October	Ancient Greek Astronomy , Bromley House Library, Nottingham
Sunday 17 th November	BAA Equipment & Techniques Section Meeting , Bedford

Social and Practical Astronomy, Plumtree, July 2019

On Thursday 18th July at Plumtree we marked 50th Anniversary of the Apollo 11 moon landing with a special meeting dedicated to the Apollo programme and the space race. The evening was extremely well attended and was nice to see the 50th anniversary sparked such interest with a record Plumtree attendance and a fantastic atmosphere in the hall.

We had 5 talks on different topics related to the achievement of putting the first man on the moon.

Gareth Davies showed how to locate the Apollo 11 landing site with a telescope

Barry Chacksfield brought in various lunar maps to talk about the geology of the moon

David Buxton talked about the development of liquid fuelled rocket engines

James Dawson tested the societies knowledge on Apollo with a space age quiz

Richard Severn gave a tour of Cape Canaveral and Kennedy Space Centre where NASA launched the Saturn V rocket to the moon.



A special thanks to Gareth, James, Barrie and David for spending time preparing talks for the evening and to Chris for baking a yummy Apollo cake.

Thanks to Roy for providing his memories of the moon landing and those who brought in Apollo memorabilia, even a vintage 1969 Triumph Herald car.

Below is a link to the Apollo video played during the meeting.

<https://m.youtube.com/watch?v=1HuJ5LangGM>

Richard Severn

NAS Membership Secretary

membership@nottinghamastro.org.uk

Social and Practical Astronomy, Plumtree, August 2019

The August meeting at Plumtree was devoted to “societies for the amateur astronomer”. The evening was divided into local clubs and societies and national ones. We were fortunate to have representatives from many of the societies, either as a special guests or from within our own membership. I am most grateful to Ann Bonell from Leicester Astronomical Society, Guy Fennimore from the Society for Popular Astronomy and Rob Dawes from Mansfield and Sutton Astronomical Society; thanks to all the others who spoke as well.



The list below (in no particular order) gives the names of the societies we talked about and a link to their websites or other online platforms.

Local clubs, societies and activities:

[Derby and District Astronomical Society](#)
[Mansfield & Sutton Astronomical Society](#)
[Leicester Astronomical Society](#)
[Melton and District Astronomical Society](#)
[Lincoln Astronomical Society](#)
[Ilkeston & District Astronomical Society](#)
[Nottingham Astronomical Society](#)
[The Long Eaton School: Malcolm Parry Observatory](#)
[The University of Nottingham Public Science Lectures](#)
[Nottingham Trent University Open Dome Lectures](#)

National bodies:

[The Society for Popular Astronomy](#)
[The Society for the History of Astronomy](#)
[Federation of Astronomical Societies](#)
[The Royal Astronomical Society](#)
[The Webb Deep-Sky Society](#)
[The British Interplanetary Society](#)
[The William Herschel Society](#)
[Commission for Dark Skies](#)
[The Astronomer](#)
[British Astronomical Association](#)



The **September** meeting at Plumtree will focus on comets. We will have a number of tables each focussing on a different aspect of comets and small groups will rotate around the tables. Most people have heard of Halley’s Comet, but what is a comet, where do they come from and why are some very bright, and some very difficult to observe? These and other questions will be answered. NASA have some pages devoted to [comets](#) if you fancy having a read up in advance of the meeting.

James Dawson

NAS Helpdesk & Plumtree Meetings
helpdesk@nottinghamastro.org.uk

NAS Annual Barbecue

In a brief respite from the wet weather experienced during August, we held the annual NAS BBQ on Saturday 3rd August on a fine warm evening. A good number of members attended with their families, with the opportunity to tour the Society's 24 inch telescope. Unfortunately clouds prevented any observing later in the evening.

A huge thankyou to Chris Sneddon and Lorraine Goss for baking such lovely cakes and providing the Pimm's, it really added to the BBQ. I couldn't resist trying all the cakes. A special thankyou to James Dawson for putting in a 5 hour mowing marathon on Friday to make the observatory site look so smart for the event, welcoming members at the gate, and drinking all the Pimm's.

Richard Severn

Pictures from the Barbecue

(Editor's Note: I've been sent an abundance of pictures taken at the barbecue – too many to include in one issue of the Journal – so thanks to everyone who provided them, and apologies if your favourite image isn't included!)





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 link to the NAS Journal, and a copy of our SkyNotes, 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

Advertisements

Meade 8-inch LX90 for sale

The Editor is aware of a **Meade 8-inch LX90 Schmidt-Cassegrain telescope with Autostar** controller for sale. See pictures below.

The owner has a price of around £500 in mind, but is open to any reasonable offer.



If you are interested, in the first instance please contact the Editor at

roygretton@hotmail.co.uk

FOR SALE

Kendrick 8-inch solar filter with custom-made box
£50

Celestron SCT-to-camera T-adapter – item number # 93633
£15

Counterweight 5.2 kg
£10

Observing stool (adjustable height)
£10

Please contact **Sam Boote**
sam@boote.myzen.co.uk or at Society meetings

Telescope offered free to a good home

NAS member Marcus Stone has a 6-inch Newtonian reflector (F8) on a Dobsonian mount which he is offering free of charge to anyone interested. The telescope is in need of some attention, but would be a good start-up instrument.



Marcus can be contacted on **07531989820**

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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