Journal

of the

Nottingham Astronomical Society

March 2020



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Thursday, March 5th

Gotham Memorial Hall Gotham, NG11 0HE

8pm (doors open at 7pm)
This evening we welcome

Dr Steve Barrett Senior Research Fellow, University of Liverpool

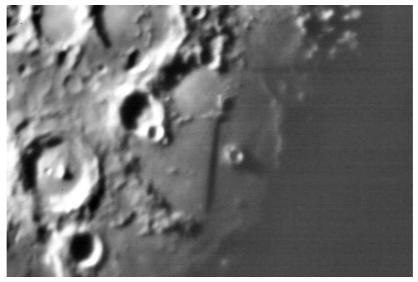


who will be speaking on

FIAT LUX 3 - The LSST Jedi

The Large Synoptic Survey Telescope
- the greatest survey yet

A Little Lunar Detail: The "STRAIGHT WALL"



Imaged by the Editor using eyepiece projection. Equipment used was a 300mm Newtonian reflector, a 6.5mm focal length eyepiece, and a Canon 450D camera

Sky Notes March 2020



Compiled by Roy Gretton

All times given below are in Greenwich Mean Time

The northern hemisphere **Spring Equinox** occurs in the early morning of March 20th, when the Sun will be exactly over Earth's equator.

British Summer Time begins on Sunday, March 29th. Clocks should be advanced one hour at 1 am on that date.

PHASES OF THE MOON

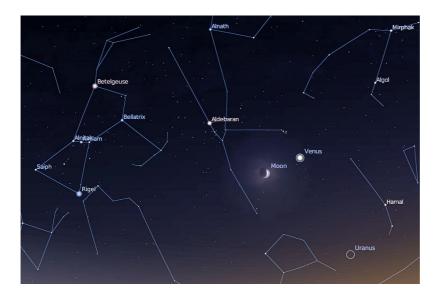
| Phase | Date |
|---------------|------------------------|
| First Quarter | March 2 nd |
| Full Moon | March 9th |
| Last Quarter | March 16 th |
| New Moon | March 24 th |

This month the Moon is closest to Earth on the 10th, and furthest on the 24th. *Spring is the best time of year for observing the crescent and First Quarter Moon in the evening sky*.

THE PLANETS

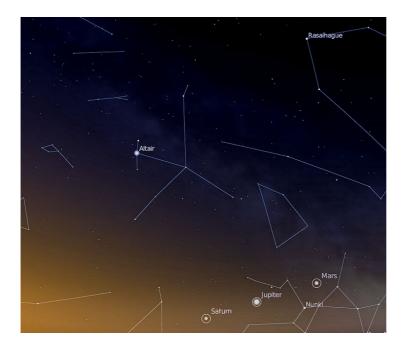
Mercury will be at greatest western elongation (28 degrees, which happens to be its maximum elongation of 2020) on March 24th. But spring is not a good time to observe Mercury in the morning sky, as the ecliptic makes a very shallow angle with the eastern horizon at this time of year. For observers in the northern hemisphere this elusive planet will be very low in the ESE, and hence an extremely challenging target.

Venus reaches greatest eastern elongation on March 24th, when it will be 46 degrees from the Sun and shining at magnitude –4.3. This is about as good an evening apparition of Venus as we can have, so friends and neighbours may well be asking, "What's that bright star?" Around that time the planet will look similar to a First Quarter Moon when viewed through a small telescope. A crescent Moon will be close by on the evening of March 28th.



Looking WSW at 7:30pm on March 28th

March begins with three superior planets, **Mars**, **Jupiter** and **Saturn** lined up in that order, from west to east, in the constellation of Sagittarius, low down in the brightening pre-dawn sky. As March progresses, **Mars** swoops past **Jupiter**, the brightest of the triplet, and ends the month close to **Saturn**. On the mornings of the 18th and 19th a waning crescent Moon is close by.



Looking ESE at 6 am on March 1st

Three superior planets in the morning sky

Uranus is disappearing into the sunset glow this month.

Neptune is unobservable this month.

METEORS

There are no notable meteor showers in March.

COMET C/2017 T2 (PANSTARRS)

This circumpolar comet spends the whole of March in the constellation of Cassiopeia, a little to the east of the 'W', as it heads towards Camelopardalis and Ursa Major, which it will reach in May. Visit www.heavens-above.com for daily updates on its position.

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

DIARY DATES 2020

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 Quiz Nights, etc, 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> |
|--|---|---|
| March 5 th | FIAT LUX 3 - The LSST Jedi The Large Synoptic Survey Telescope, the greatest survey yet | Dr Steve Barrett Senior Research Fellow, University of Liverpool |
| April 2 nd | EXTREMOPHILES Why there must be life elsewhere in the Universe | Dr Martin Braddock FRAS |
| May 7 th | Wonders of the Southern Sky | Professor Ian Morison Emeritus Gresham Professor of Astronomy |
| June 4 th | VENUS - why so different? New insights from our closest earth sized planet | Dr Richard Ghail Royal Holloway, University of London |
| July 2 nd | Live Long and Prosper The search for Vulcan and other hypothetical Solar System objects | Dr Ann Bonell Leicester Astronomical Society |
| August 1 st (Saturday, 5pm) | NAS Annual BBQ at the Observatory | |
| September 3 rd | The Plumes of Enceladus | Dr Chris Arridge Reader, University of Lancaster |
| October 1 st | Speaker and title to be confirmed | |
| November 5 th | Annual General Meeting followed by a Wine and Cheese Buffet | |
| December 3 rd | The Vikings at Barsoom - Part 1 Orbital Operations | Paul Money |

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 March 21st (see further details below)

Nottingham Astronomical Society 2020 Membership

Membership subscriptions for 2020 are now due for renewal. All current members should have received their renewal forms by email detailing your membership rate.

Individual £30, Partnership £45 Concessions £5

To renew your subscription please either:

- 1) Complete the renewal slip sent via email and return with a cheque (payable to Nottingham Astronomical Society) to the Membership Secretary, Nottingham Astronomical Society, 16 Maygreen Avenue, Cotgrave, Nottingham, NG12 3SH.
- 2) If you bank online then payment may be made direct into the Society's bank account as follows: Bank: NatWest, Sort Code: 56-00-61, Account: 44992254. Please quote the following reference: your name and membership number if known in the bank transfer reference. Please confirm by email to membership@nottinghamastro.org.uk that you have made an online bank transfer.
- 3) Bring the renewal slip to a Gotham or Plumtree monthly meeting. Payment may be made by either cheque or cash. (If you are paying by cash it would be helpful if you could bring the correct change).

Looking forward to seeing you at our 2020 meetings

Richard Severn

Membership Secretary

Social and Practical Astronomy, Plumtree, February 2020

The **February** meeting at Plumtree saw Julian Onions bring along three PhD students from The University of Nottingham to talk to us on their research.

Roan Haggar talked on "Galaxy clusters & backsplash galaxies", Lizzie Elmer talked on "Flickering black holes in the distant universe", and Tom Peterken spoke about "tracing the formation of spiral galaxies".

All three gave fascinating talks on their respective topics, and delivered some highly complicated material at a level we could all understand. The three of them are clearly very able speakers and are truly becoming experts in their field. We wish them all the best for their PhDs and their research and we will no doubt see them on the amateur astronomy lecture circuit and maybe on TV in the future. Thanks to Julian and the speakers for coming to talk to us.



Left to right: Roan Haggar, Tom Peterken, Lizzie Elmer, Julian Onions

Our chairman John Hurst will be running the **March 2020** meeting at Plumtree, and this will be an opportunity to discuss the Society's Observatory. We will also have a short talk if time allows.

James Dawson

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



The British Astronomical Association One Day Meeting Saturday 25th April 2020



'Cosmology, Galaxies & Exo-planets'

The Grange & Grange Hall, Vicarage Lane, Radcliffe on Trent, Nottingham, NG12 2FB

This meeting is being hosted by Nottingham Astronomical Society with professional research in astrophysics by some of the experts in their field to provide an enlightening day.



We will be looking at: "The interplay between black holes and galaxies"; "Star & Planet formation"; "Searching for Exoplanets and other Earths". We will also be looking at "Origins: The universe to intelligent life and everything in between".





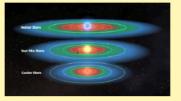
Our Speakers for the day will be: Prof Frazer Pearce, Prof Christopher Conselice,
Prof Peter Wheatley,
Prof Simon Goodwin & Dr James Mullaney



Doors Open at 10:00 and the meeting will close at approx. 18:00



The cost including tea & coffee for registration, afternoon tea and a cold buffet lunch is £12:50 for BAA, NAS members, Affiliated Society Members and Accompanied under 16's; £15:00 for Non-Members



Full details can be found on the BAA website www.britastro.org/nottingham2020
You can book on line or by calling the BAA Office on 0207 734 4145 by 13th April 2020.

Event Organiser: Mrs Hazel Collett, E: meetings@britastro.org T: 07944 751277

Local Co-ordinator: Mr John Hurst, E: president@nottinghamastro.org.uk T: 01509 853382

Retailers attending will be BAA Sales, Rother Valley Optics and Crystal Nebulae

Our thanks go to the Nottingham Astronomical Society who are hosting this meeting

The Horsehead and Flame Nebulae imaged by Marcus Stone

A fascinating area of sky in the constellation of Orion. The bright star is Alnitak.



Imaged captured over a 20-minute period using a Canon 60Da camera at ISO1600 attached to an 80mm Meade telescope on 2nd December 2019, and processed using Photoshop

Marcus comments that this was an exceptionally clear and still night

Nottingham Astronomical Society

Affiliated to the **B**ritish **A**stronomical **A**ssociation Member of the **F**ederation of **A**stronomical **S**ocieties Supporters of the **C**ommission for **D**ark **S**kies

CHAIRMAN:

John Hurst

e-mail: president@nottinghamastro.org.uk

VICE CHAIRMAN:

Roy Gretton

e-mail: vicepresident@nottinghamastro.org.uk

SECRETARY:

David Buxton

e-mail: secretary@nottinghamastro.org.uk

TREASURER:

Mike Provost

e-mail: treasurer@nottinghamastro.org.uk

JOURNAL EDITOR:

Roy Gretton

e-mail: journal@nottinghamastro.org.uk

MEMBERSHIP SECRETARY

Richard Severn

email: membership@nottinghamastro.org.uk

CURATOR OF INSTRUMENTS:

Leigh Blake

e-mail: curator@nottinghamastro.org.uk

DIRECTOR OF OBSERVING:

(vacant post)

email: observatory@nottinghamastro.org.uk

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 2020

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 <u>secretary@nottinghamastro.org.uk</u> 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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