
Journal

of the

Nottingham Astronomical Society

March 2021

In this issue

- A Message from the Chairman
- Book promotion
- NAS Membership 2021
- E-Services
- Sky Notes for March
- Diary Dates for 2021
- Social and Practical Astronomy: meeting report
- Memories of the NAS by Stuart Atkin
- Results from the eVscope
- Advertisement
- Society Information

Thursday, March 4th

8pm: ONLINE

Tonight we welcome

Dr Steven Banham
of Imperial College, London



who will be speaking on

Exploring Mars

**Planning the next missions
to the Red Planet**

New Arrangements for our monthly “Gotham” meetings

These meetings, held on the first Thursday of each month, are intended for members of the Society only. “Plumtree” meetings – those held on the third Thursday of each month – will continue to be freely accessible to the public via YouTube.

Until further notice, our main meetings will be held on YouTube and will be for **members only**. Members will be emailed a link to the live stream on YouTube about 20 minutes before the meeting commences at 8pm. You will not be able to search for the meeting in YouTube, access is via the link provided in the email only.

For non-members wishing to watch our meetings, please email membership@nottinghamastro.org.uk before the meeting and we will send you a link to your first two meetings before requesting you join the society to join future online meetings.

Chairman's Message – March 2021

Dear all,

Welcome to the March issue of the journal. I'm glad so many people could join us on zoom last week to experience the landing on Mars of Perseverance, I think it worked out very well, and I'm sure we are all pleased it landed safely. Thanks to Andrew for an informative talk on the mission, and also to Joel Miller for showing his Mars images.

There is a great video of it now online from NASA/JPL showing video from the lander itself which has to be seen if you've missed it! We have as our next formal meeting Dr Steve Banham from Imperial College on exploring Mars to continue the theme of the exploration of Mars which I'm sure will give some great information.

We will continue with our online events until further notice, and there is even the possibility we will have some of these online even after the pandemic is over, or possibly some sort of hybrid, but we will cross that bridge when we come to it.

Meanwhile, stay safe, and let us hope we can meet up again soon!

Julian

NAS Chair

A Communication from Andreea Zaharia of World Scientific Publishing

Astronomy Title Promotion

I would like to bring to your attention one of our newest Astronomy titles called ***Cosmic Pinwheels: Spiral Galaxies and the Universe***. The main goal of the book is to introduce the reader to the world of spiral galaxies, how spirals were discovered, what they represent from a physical point of view, and what people have learnt about the universe and the nature of galaxies in general from the study of spirals.

The book is profusely illustrated and not only a discourse on the spirals, but is also a personal reminiscence based on the author's studies of spiral galaxies over the past 45 years. This is a perfect title for anyone interested in galaxies and I am happy to offer a 30% discount for your members.

Just introduce the code WSCOSMIC30 at the checkout on our website when ordering until the **28th of February 2021** in order to take advantage of this offer.

Please see here for more information on the title:

<https://www.worldscientific.com/worldscibooks/10.1142/11725>

Sample chapter: https://www.worldscientific.com/doi/pdf/10.1142/9789811216695_0001

Nottingham Astronomical Society 2021 Membership

Membership subscriptions for 2021 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) If you have an online banking facility then payment can be made direct into the Society's bank as follows: Bank: NatWest, Sort Code: 56-00-61, Account: 44992254

Please enter your surname and membership ID as the reference. Please confirm by email to treasurer@nottinghamastro.org.uk that you have made an online bank transfer.

Some banks require you to enter the name of the receiving bank account as an anti-fraud measure.

Our account name is 'Nottingham Astronomical Society', however character limits may only allow you to type in 'Nottingham Astronomical Societ'

2) Paying by cheque

Please make cheques payable to 'Nottingham Astronomical Society' and send to:
Nottingham Astronomical Society, Dr Mike Provost, 85 Balmoral Road,
Bramcote Hills, Nottingham, NG9 3FT

3) If you are unable to pay by Bank Transfer or via Cheque, we will accept cash payment to the above address but this is entirely at your own risk and we do not recommend sending cash by post.

To all those that have joined already, a huge thanks for your continued support for the society, especially during this period we have been unable to meet face to face.

Richard Severn

Membership Secretary

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

Sky Notes

March 2021



Compiled by Roy Gretton

All times given below are in Universal Time (Greenwich Mean Time)

The **Northward Equinox** (Spring Equinox for observers in our hemisphere) occurs on the morning of March 20th.

British Summer Time begins on March 28th. Clocks should be advanced by one hour at 1 am on that date.

PHASES OF THE MOON

<i>Phase</i>	<i>Date</i>
Last Quarter	March 6 th
New Moon	March 13 th
First Quarter	March 21 st
Full Moon	March 28 th

This month the Moon is closest to Earth on the 30th, and furthest on the 18th.

THE PLANETS

Unfortunately, bright planets continue to be elusive this month

Mercury is a morning object throughout March, and will be at greatest western elongation (27 degrees) on the 6th, but poorly placed for UK observers, being nearly 16 degrees south of the celestial equator on that date.

Venus is totally unobservable this month, reaching superior conjunction on March 26th.

Mars continues its eastward motion in the constellation of Taurus, passing between the Hyades and Pleiades star clusters from the 4th to the 10th of March. This month its angular diameter falls below 6 arcseconds, and its magnitude fades to dimmer than +1, so there are a number of stars in the surrounding sky that are now noticeably brighter than the Red Planet.

Jupiter and **Saturn** have just begun to emerge into the morning sky. By the end of the month Saturn will be rising almost two hours before the Sun, and Jupiter just over one hour. Jupiter is now moving significantly northward in our sky: having begun the year 20 degrees south of the equator, it will end this month less than 15 degrees south.

Uranus, magnitude 5.8, will be setting at 11 pm as March begins, and before 9 pm by the close of the month.

Neptune is unobservable this month.

METEORS

There are no notable meteor showers in March.

DIARY DATES 2021

Monthly Meetings of the Nottingham Astronomical Society

**There will be no meetings at
Gotham or Plumtree until further notice**

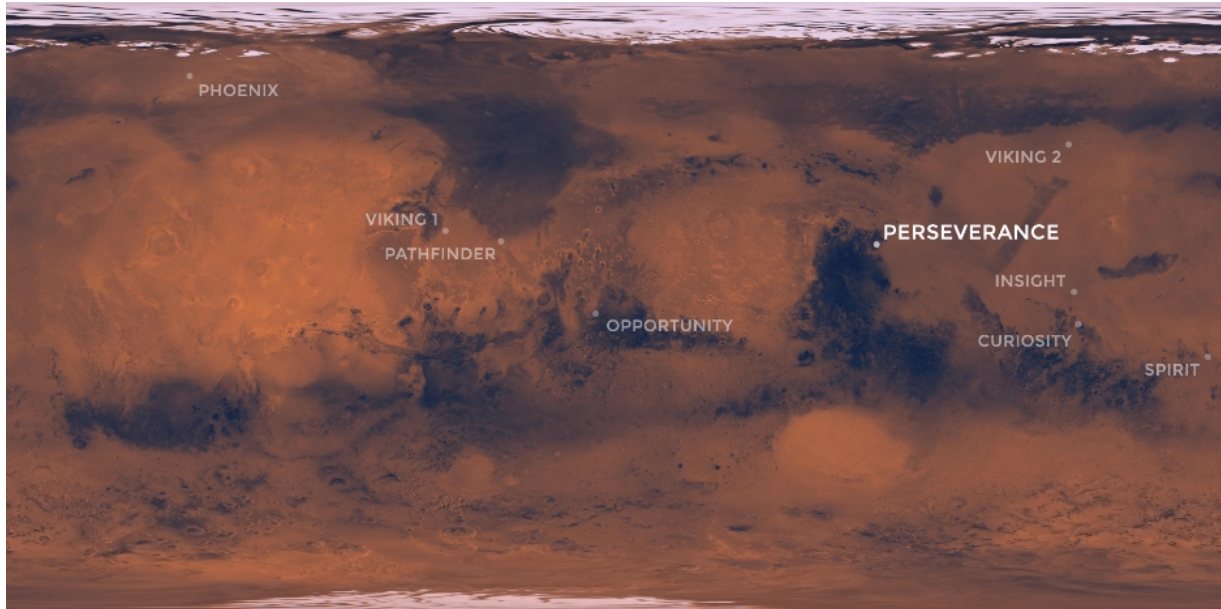
*We nevertheless continue to display our pre-arranged programme of speakers
in the hope that it may be possible to livestream these talks.*

***Members of the Society will receive further updates
each month from the Chairman***

Date	Topic	Speaker
March 4 th	Exploring Mars <i>Planning the next missions</i>	Dr Steve Banham Imperial College, London
April 1 st	Astronomical Adventures in Tenerife	Dave Eagle
May 6 th	Extremophiles <i>Why there must be life elsewhere in the Universe</i>	Dr Martin Braddock AstraZeneca UK
June 3 rd	Harbingers of Doom? Comets	Prof Ian Morison Emeritus Gresham Professor of Astronomy
July 1 st	The JUICE Mission <i>Exploring Jupiter's icy moons</i>	Dr Chris Arridge Lancaster University
August 7 th <i>(Saturday)</i>	Annual Barbecue at the Observatory <i>(Members and their guests only)</i>	
September 2 nd	The Vikings at Barsoom Part 2: The Search for Life	Paul Money FRAS, FIBS
October 7 th	Fiat Lux 3 <i>The Large Synoptic Survey Telescope</i>	Dr Steve Barrett University of Liverpool
November 4 th	Annual General Meeting with a Wine and Cheese Social	
December 2 nd	The NAS Christmas Lecture <i>to be confirmed</i>	

Social and Practical Astronomy, Plumtree, March 2021

Our **February 2021** online Plumtree meeting was hosted by Julian on Zoom as was an evening dedicated to Mars as the meeting coincided with the landing of the Perseverance Rover in Jezero Crater. The locations of other successful NASA Mars landings is shown in this NASA image:



Andrew Green gave a fascinating talk about the mission and its aims and some of the apparatus on the rover which will be used to conduct the search for the traces of past life on this now desolate, but beautiful world.

Nottingham University PhD student, Joel Miller, showed us a time-lapse animation of Mars rotating he took with his own reflecting telescope in his back garden in the autumn which drew the attention of the media last year. Joel talked us through his interest in astronomy as well as the equipment he used to capture this amazing image.

Between talks Julian cut to the NASA broadcast and narration of how the landing was going.

It was a nail-biting few minutes but everyone on the Zoom call was greatly relieved to hear the sky crane had successfully entered the Martian atmosphere and lowered the Perseverance rover to the surface below. The images and videos which have since been released by NASA are amazing and these can be seen on the NASA website: <https://mars.nasa.gov/mars2020/>

The topic for the **March 2021** online Plumtree Meeting is yet to be confirmed, but we will email the details nearer the time.

James Dawson

helpdesk@nottinghamastro.org.uk

My memories of membership with the Society

by Stuart Atkin

I am not renewing my NAS membership this year, as due to advancing years we have decided to move to Ormskirk in Lancashire to be near to my two daughters. Roy has asked me to mention a few details about my time with the society. He never misses a trick does he?

My interest in astronomy started when I was about 17 walking home from night school. I looked into the night sky and thought what a beautiful sight. There were very few street lights at that time.

For some reason I never followed this up until 1986. Probably having a wife, and two daughters to bring up. In 1986 my elder daughter showed an interest and we went outside to look for Halley's comet. We missed it the first night but saw it the following night. This prompted me to join the Society which then met in the Polish Club in Nottingham, There were only about 30 members. We then moved to a school a little further up the road. We met each month on the first Thursday and like now we had a meeting on the third Thursday but it was at the home of one of the members.

I joined the Committee, and we used the third Thursday meetings to discuss problems and development of the Society. On the good evenings we probably went outside to look through a member's telescope. At that time the observatory at Cotgrave was just a round brick wall and the mirror we have was under the bed of the then president, Brian Griffin, awaiting a home. The site was developed with a dome that I believe came from a farm in the southwest. The membership in those days was fairly stable so funds were minimal and the site was visited to carry out work, and on good evenings to use members own telescopes.

A notable event for the Society occurred in January 2012 with a big astronomy show in Wollaton Park. The gates had to be closed early about 8pm as traffic waiting to enter the park was causing a hold up and the police had to intervene. I was involved on the stand in the hall and about 6.30pm was asked by Carol Hinds BBC East Midlands TV if I would do an interview with her which was to be live on the East Midland News. For a few days after the greeting was "saw you on telly". That apart, the evening was a huge success for the Society, with membership increasing to somewhere around three figures. As a result this speeded up the development of the facility at Cotgrave, which was officially opened by Mike Merrifield.

I know there is a lot of conjecture about the way forward. I will not be involved in this but I was always concerned about climbing a ladder in the dark to look through the eyepiece. Atik make a camera that produces an immediate image on a screen which can be viewed by everyone. The cost I believe is under £1000 and it would be safer, and more people could view the image at the same time. More objects could therefore be viewed.

I hope the society can achieve its goals and I would like to thank everybody for the enjoyment I have had over the years.

Stuart

Results from my eVscope

I've now had my Unistellar eVscope (see <https://unistellaroptycs.com>) for three months and have been using it in my heavily light-polluted back garden at Bramcote whenever weather conditions permitted (which hasn't been that often, unfortunately). I'm really pleased with the results that I've been getting, after putting in a bit of time and effort to collimate and focus it correctly: the Unistellar helpdesk has been very helpful with any queries that I've had.

Here are a few of my photos: if anybody wants me to email them either the original images or any of the others that I've taken, then please contact me. The photos are as produced by the eVscope: I've tried a number of packages in an attempt to process them further, with mixed results.

One very interesting exercise was photographing Uranus over several nights: not only was the movement of the planet clearly visible against the background stars, but the orbital movement of two of its moons was clearly visible.

I'm looking forward to many years of exploring the universe with this excellent piece of equipment.

Thanks.

Mike Provost: Treasurer, Nottingham Astronomical Society.

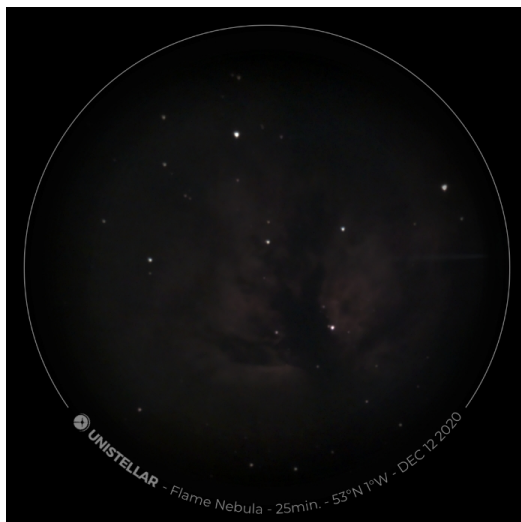
treasurer@nottinghamastro.org.uk



Bubble Nebula



Crab Nebula



Flame Nebula



M78



M81



M103



M106



M108



NGC0891



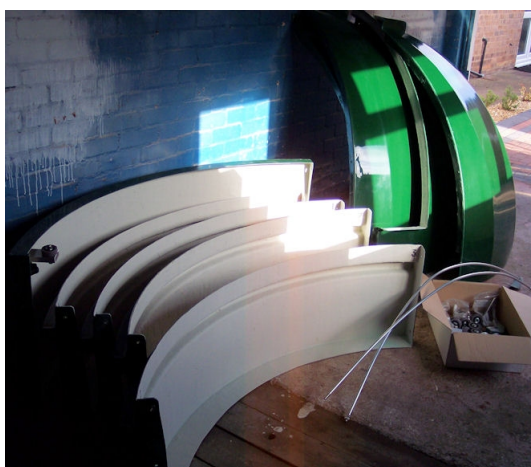
Triangulum galaxy, M33

Advertisement

FOR SALE

Pulsar 2.1-metre Observatory Dome and Track in Racing Green

Made by the leading UK manufacturer of GRP observatory domes.
The dome and the track are each fabricated in four segments that bolt together.
The track is intended to be fixed to a flat roof (and could be used for converting a roll-off roof observatory into a domed one).
The complete kit was purchased in 2008.



The dome and track sections as delivered from Pulsar



The track fitted to a flat-roofed shed



The dome mounted on the track

The original price of the dome and track was **£2000**

Suggested price **£500**
but any offer will be considered

Contact **Roy Gretton** on 07483868162 or journal@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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Meetings

Under normal circumstances 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 2021

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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