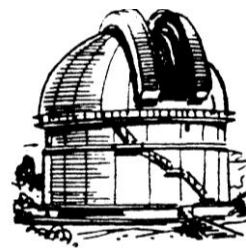

Journal

of the



Nottingham Astronomical Society

June 2010

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Thursday, 3rd June

at the

**British Geological Survey
Nicker Hill, Keyworth**

8 pm (doors open at 7.30pm)

Tonight we welcome

Professor Mark Sims

of the Department of Physics and Astronomy
University of Leicester

who will be speaking on

**'Is there, or has there been,
Life on Mars?'**

SUMMER: An Opportunity to Observe Noctilucent Clouds

Noctilucent clouds (NLCs) are pale blue filamentary clouds, lying far above the normal clouds we associate with the weather. Typically they are formed about 50 miles above the Earth's surface, and become visible when illuminated by the Sun when it is well below the horizon. They are still poorly understood, but their "electric blue" appearance is quite distinctive. This year there is some interest in the question of whether or not the Icelandic volcanic eruption will have any effect on the incidence of NLCs, although on the face of it this may seem unlikely, as the clouds form far above the ash layer.

If you wish to see NLCs, look toward the north or northwest on a clear evening after 10.30. Last year there were good displays during the weekend of 12-13th June (observed from Derbyshire by the Editor), and again on Wednesday June 17th (observed from Nottingham) – although he didn't have his camera to hand on those occasions!

You might like to try capturing NLCs with your own digital camera. Use a tripod if you have one, and experiment to find the best exposure setting.

Sky Notes

June 2010

Compiled by Roy Gretton



The SUMMER SOLSTICE, when the Sun reaches its most northerly declination of the year, occurs at 10.28 am BST on June 21st. For about a month either side of this date the sky is never truly dark at the latitude of Nottingham, even at midnight, making it the least productive time of the year for amateur astronomy.

PHASES OF THE MOON

Last Quarter occurs in the late evening of June 4th
New Moon occurs in the late morning of the 12th
First Quarter occurs on the morning of the 19th
Full Moon occurs close to midday on the 26th

This month the Moon is closest to Earth on the 15th, and furthest on the 3rd.

THE PLANETS

Mercury passes through superior conjunction (on the far side of the Sun) on June 28th, and will not be well-placed for observation this month.

Venus is a brilliant (magnitude -3.9) “evening star” in the constellation of Gemini at the beginning of June. It will then cross into Cancer and pass in front of M44, the Beehive Cluster, on June 20th and 21st.

Mars is an orange first magnitude evening object, visible in the twilight in the constellation of Leo, but has shrunk to little more than five arcseconds in diameter this month, making the planet a featureless blob through a telescope.

Jupiter is a morning object, lacking prominence due to its low altitude, but it will be rising shortly after 1 am by the end of the month. Of interest is the fact that for the first two weeks of June, Jupiter and Uranus will be less than one degree apart, their closest approach being on June 8th, when they will be separated by less than one Moon-diameter.

Saturn, heading ever closer to the twilight glow, will become harder to observe in the evening sky as the month progresses.

Uranus and **Neptune** are both morning objects. Uranus, at magnitude 5.8, has an apparent diameter of 3.5 arcseconds, and, as already mentioned, will be close to Jupiter in the constellation of Pisces in early June, and should therefore be relatively easy to find. Neptune, at magnitude 7.9, is a much more difficult target in the constellation of Aquarius.

METEORS

The lack of true darkness makes all but the brightest meteors difficult to observe in June.

DIARY DATES 2010

Meetings of the Nottingham Astronomical Society

Our programme for the coming months is below. Don't forget to check our website:
www.nottinghamastro.org.uk
for the latest information about the Society's meetings and observing sessions.

Thursday 3rd June 2010

British Geological Survey, Keyworth
8.00pm (Doors open 7.30pm)

Talk: **'Is there or has there been Life on Mars?'**

Prof. Mark Sims

Physics and Astronomy Department
University of Leicester

Thursday 1st July 2010

British Geological Survey, Keyworth
8.00pm (Doors open 7.30pm)

Members Evening, with short talks by members of the NAS, including

**"After the Space Shuttle, What's Next? -
NASA's plans for the future of human spaceflight"**

Paul Stocks

Thursday 2nd September 2010

British Geological Survey, Keyworth
8.00pm (Doors open 7.30pm)

Talk: **"WIMP Hunting: The Search for Dark Matter"**

Dr Anne Green

School of Physics and Astronomy
University of Nottingham

Thursday 7th October 2010

British Geological Survey, Keyworth
8.00pm (Doors open 7.30pm)

Talk: **"Cosmology and the LHC
(what the LHC might or might not tell us about the universe)"**

Susan Cartwright

Department of Physics and Astronomy
University of Sheffield

Thursday 4th November 2010

British Geological Survey, Keyworth
8.00pm (Doors open 7.30pm)
Annual General Meeting 2010

Thursday 2nd December 2010
British Geological Survey, Keyworth
8.00pm (Doors open 7.30pm)

Talk: "Herschel: seeing the stolen starlight"
(what the Herschel space telescope is showing us
about the hidden side of the Universe.)

Dr Loretta Dunne
School of Physics and Astronomy
University of Nottingham

If you know of anyone who is willing to give an astronomy or science-related talk at one of our monthly meetings, please let the Secretary (or any committee member) have their contact details

The Nottingham Astronomical Society: E - SERVICES

'Beehive' Website

Whether or not you are a NAS member, you can now keep up to date with details of the Society's meetings and other events by visiting the NAS website:

www.nottinghamastro.org.uk

NAS Journal e-mailing list

To register for your monthly e-mailed copy of the NAS Journal, just e-mail

info@nottinghamastro.org.uk

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

NAS Members may submit private advertisements for inclusion free of charge in the Journal. Please email the Editor.

Nottingham Trent University Open Dome Event - "In Search of the Northern Lights"

- Date:** 24 June 2010
- Time:** 4.00pm - 6.00pm
- Event:** Open Dome Event - In Search of the Northern Lights
- Location:** Optical observatory, Clifton campus
- Details:** The Northern Lights are one of the wonders of our solar system and show us how active our Sun is. But why? A small group of NTU students with an interest in astronomy set off in search of Northern Lights on a trip they described as one of the greatest experiences of their lives. Join us this month for an illustrated account of their journey. The event will start at 4pm at the NTU observatory where visitors will get a tour of the NTU observatory and the chance to see the Sun with the observatory's solar scope or small telescopes if the weather allows it. If the weather is not good, a small planetarium session will be offered in the observatory pointing out objects of interest. At 5pm we will continue to CEL 015 for a talk titled In Search of the Northern Lights, presented by members of the Astronomy and Physics Society (NTU). In the talk we will share our experience in Norway. Giving an overview of our aims, our visit to Tromsø university and share our photos from the Northern lights we saw ourselves. We will also talk about some of the myths relating to the Northern lights and explain how they are created. This talk will be followed by a brief introduction on what is visible in this month's sky.

Booking is required for this event. Please contact [Daniel Brown](#) to register.

For further information about the optical observatory, please visit the [observatory website](#).

Public astronomy lecture at the University of Nottingham

"History of Space Exploration: Looking for New Horizons"

- Speaker: Fernando Buitrago
- Date: Thursday 17th June 2010
- Time: 6-7 pm
- Venue: Maths & Physics Building (B1)
University Park Campus
Nottingham

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:

Subscription rate:	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:

Nottingham Astronomical Society

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Member of the **Federation of Astronomical Societies**
Member of the **Society for Popular Astronomy**
Supporters of the **Campaign for Dark Skies**
Registered Charity No: 1066645

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Dorothy Sowerby

Kevin Greally

David Anderson

Julie Morledge

Meetings

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

**The British Geological Survey
Nicker Hill
Keyworth
Nottingham NG12 5GG**

Doors open 7.30pm

Meetings start 8.00pm

Meetings end 10.00pm

Meetings are open to the public, and visitors are always welcome to attend.

Annual subscriptions 2009/10

Full	£25
Concessions	£12.50
Joint rate for partners living at the same address	£37.50

Subscriptions become due on 1st October. Half-price subscription is charged if joining after 1st April. 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 info@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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