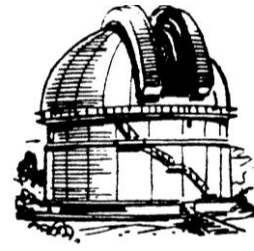

Journal

of the



Nottingham Astronomical Society

February 2007

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Thursday 1st February
at the

British Geological Survey
Nicker Hill, Keyworth
8 pm (doors open at 7.30pm)

Tonight we welcome
Dennis Ashton, FRAS

who will be speaking on

The Leonid Meteors

DETECTING LIGHT FROM 12.7 BILLION YEARS AGO

Japanese astronomers using the 8.2-metre Subaru telescope in Hawaii have detected a galaxy at a redshift (z) of 6.96, which corresponds to a distance of 12.7 billion light-years, and suggests that the galaxy is being seen as it was when the universe was only 800 million years old. A redshift as great as this means that ultraviolet radiation originally emitted by excited hydrogen atoms in newly-formed stars (at a wavelength of 121.6 nanometres) has been stretched by the expansion of space to the extent that it arrives on earth at a wavelength of 968.2 nanometres, in the near infrared. This is close to the limit of detection for the silicon CCDs employed in these observations.

Sky Notes

2007 February

Compiled by Roy Gretton



PHASES OF THE MOON

Full Moon occurs in the early morning of the 2nd
Last Quarter occurs late morning on the 10th
New Moon occurs in the late afternoon of the 17th
First Quarter occurs shortly after dawn on 24th

This month the Moon is closest to Earth on the 19th, and furthest from Earth on the 7th.

THE PLANETS

Mercury reaches its greatest eastern elongation on February 7th, and so will be visible low in southwestern sky after sunset, provided the sky is sufficiently transparent. On this same date, Mercury will be less than 7 degrees from Venus (Mercury being the fainter of the two, and to the lower right of Venus, which may help you to locate Mercury). After this, Mercury moves back towards the Sun, reaching inferior conjunction (between Earth and Sun) on February 23rd.

Venus is now a prominent object in the southwest as darkness falls. It is the brightest object in the heavens other than Sun and Moon, shining at magnitude -3.8.

Mars appears as a relatively faint (magnitude 1.5) object in the morning sky this month. Telescopically the planet is of little interest, as it appears less than 5 arcseconds across. The Red Planet is moving ahead of the Earth in its orbit, and it will take Earth almost the whole year to catch up, but it will finally overtake Mars on Christmas Eve.

Jupiter is to the morning what Venus is to the evening: a bright planet low in sky, but in this case visible in the southeast. In fact, Jupiter will be due south at sunrise by the middle of February, but being in the constellation of Ophiuchus, it will be only 15 degrees above the horizon, a distinct disadvantage for telescopic observers.

Saturn is a lovely sight, near Regulus, the brightest star in the constellation of Leo. On February 10th it reaches opposition, and so will be due south at midnight, at an elevation of 53 degrees. Saturn will thus be visible throughout the night, shining at magnitude zero. The planet is at present undergoing retrograde motion (i.e. moving westward as seen from Earth) because the Earth is racing past it in the “fast lane”.

Uranus in the constellation of Aquarius, and **Neptune** in the constellation of Capricornus, are unobservable this month.

METEORS

There are no notable meteor showers in February.

VARIABLE STAR: Algol

There are no fewer than six minima of the dark-eclipsing variable Algol (Beta Persei) visible from the UK this month. They occur on February 3rd (at half past midnight), 5th (9.30 pm), 8th (6.20 pm), 23rd (2.25 am), 25th (11.10 pm) and 28th (8.05 pm). The star dims from its normal brightness (magnitude 2.1) to magnitude 3.4 over a period of about five hours.

DIARY DATES 2007

Meetings of the Nottingham Astronomical Society

Our programme for the coming months is below. Don't forget to check our website: <http://beehive.thisisnottingham.co.uk/nottinghamastro> for the latest information about the Society's meetings and observing sessions.

Thursday 1 February 2007

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

The Leonid Meteors

Dennis Ashton FRAS

Thursday 1 March 2007

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

Light Pollution: The problem and solutions

Dr Darren Baskill
University of Leicester

OTHER EVENTS

**Friday 9 February
& Saturday 10 February**

European Astrofest 2007

Kensington Town Hall,
Hornton Street,
London

Conference programme organised by [Ian Ridpath](#)

For programme details, location map and ticket prices, see www.astronomynow.com/astrofest

Ticket hotline:
01732 446106
or 01732 367542

Small Advertisements

For Sale

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**This advertising space is available
free of charge to society members**

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 'Beehive' website:

<http://beehive.thisisnottingham.co.uk/nottinghamastro>

NAS Journal e-mailing list

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

nottinghamastro@yahoo.co.uk

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

NAS Observatory Group

A web group page and message service (for NAS members only) is available at

<http://uk.groups.yahoo.com/group/nottinghamastronomicalsociety/>

It is used for circulating information to members about work at the observatory and use of the large telescope. If you are a member of the Society, you can join this online group by visiting the website and clicking on "Join this Group".

Nottingham Astronomical Society

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APPLICATION FOR MEMBERSHIP

If you would like to join the Nottingham Astronomical Society, please complete and tear off this slip. Make your cheque/postal order payable to:

THE NOTTINGHAM ASTRONOMICAL SOCIETY

Then send the slip and payment to Paul Stocks, Hon. Secretary, **Nottingham Astronomical Society**, 22 Killerton Park Drive, West Bridgford, Nottingham, NG2 7SB

Alternatively you may hand the slip and payment to the Secretary or Treasurer at one of the Society's regular meetings.

Your name _____

Full address _____

_____ Postcode _____

I wish to join the Nottingham Astronomical Society and enclose the membership fee for

(please tick appropriate box)

- Full Adult £25
- Junior (17 years or under) £12.50
- Concession (*full time student, UB40, etc*) £12.50

Nottingham Astronomical Society

Affiliated to the **British Astronomical Association**
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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Joe Sowerby

Dorothy Sowerby

Kevin Greally

Meetings

Our meetings, often with an illustrated talk by a guest speaker, are held on the first Thursday of each month (except in August & October) 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 2006-07

Adult	£25
Junior (under 18 years)	£12.50
Concessions*	£12.50
(*Full-time student, jobseeker's allowance, basic state pension)	

Subscriptions become due on 1 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, Paul Stocks, or speak to any NAS committee member at one of the regular monthly meetings. A membership application form appears inside this issue of the Journal.
