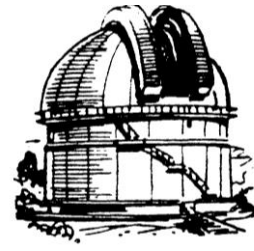


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# Journal

of the



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## Nottingham Astronomical Society

September 2005

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**Thursday September 1<sup>st</sup>**

at the Djanogly City Academy

*Doors open from 7.30pm*

This evening we welcome

**Dr Alfonso Aragon-Salamanca**  
of the University of Nottingham

who will be speaking on the subject of

***“Why galaxies look  
the way they do”***

**Inside this issue**

- Sky Notes for September
- Diary Dates
- Advertisements
- E-Services
- Membership application form
- Society Information

**WELCOME TO ANOTHER SEASON OF ASTRONOMICAL  
OBSERVATION!**

*(Is it only astronomers who look forward to longer nights?)*

**Highlights of this autumn's observing include:**

- A partial eclipse of the Sun on October 3<sup>rd</sup> (more details in next month's Journal).
- Opposition of Mars in early November, with the planet achieving an apparent diameter of 20 arcseconds.

...and of course the Society's observatory and large telescope coming into regular use.

# Sky Notes

## 2005 September

Compiled by Roy Gretton



*All times quoted are U.T.*

*To convert to British Summer Time you will need to add one hour.*

**THE AUTUMNAL EQUINOX** occurs at 22h 23m on September 22<sup>nd</sup>. At this precise time the centre of the Sun is on the celestial equator.

### PHASES OF THE MOON

New Moon occurs in the early evening of September 3<sup>rd</sup>.  
First Quarter occurs around midday on the 11<sup>th</sup>.  
Full Moon occurs in the early morning of the 18<sup>th</sup>.  
Last Quarter occurs around dawn on the 28<sup>th</sup>.

This month the Moon will be furthest from Earth on September 1<sup>st</sup>, and nearest to us on September 16<sup>th</sup>. In this country the September Full Moon is commonly known as the *Harvest Moon*.

### THE PLANETS

**Mercury** reaches superior conjunction (the position on its orbit where it is on the opposite side of the Sun from Earth) on September 18<sup>th</sup>, so there are no useful observing opportunities this month.

**Venus** is an evening star during this autumn, and relatively easy to spot due to its brightness (magnitude -4) provided that your western skyline is not obstructed too much. Venus will be low down in the west after sunset, its low altitude being due to its southerly position in the zodiac. So although the planet is more than 40 degrees from the Sun, it will be setting only about an hour after sunset.

**Mars** is now definitely the planet of choice for observation, as it rises in the evening (in the constellation of Aries) and brightens to magnitude -1.6 by the end of September, when its apparent diameter will have increased to nearly 18 arcseconds. Conditions will continue to improve until early November when Mars will reach opposition.

**Jupiter** is unobservable this month, as it approaches conjunction in October.

**Saturn** is beginning to put in an appearance in the early morning sky, and by the end of September will be rising at 01h UT (2 a.m. BST). If you are in the habit of observing Saturn through a telescope you will see that the ring system is noticeably more “closed” than it was in the early part of this year.

**Uranus** and **Neptune** are about as well-placed this month as they are likely to be in 2005. Uranus (magnitude 5.7, apparent diameter just under 4 arcseconds) is at opposition on September 1<sup>st</sup>, when it will be about 3 degrees south-preceding Lambda Aquarii. Neptune (magnitude 7.8, apparent diameter 2½ arcseconds) was at opposition on August 8<sup>th</sup> and is about 3 degrees west of Iota Capricorni.

For observers with binoculars, Uranus is very easy to see, but even if you look at the correct area of sky you may not be sure which of the “stars” on view is this gas giant. You might find it an interesting exercise to make a sketch of what you see on two nights, separated by about a week, and pin-point Uranus as the star that has moved.

## **METEORS**

Many meteors are identified as belonging to known showers, but many others are designated as “sporadics” because they appear randomly without any identifiable connection to a known stream. September is said to be the month of the year that brings the highest rates of sporadic meteors for observers in the northern hemisphere, with the latter half of the night being the most favoured. Otherwise there are no major meteor showers in September. The Piscids put in an appearance, but the expected number of sightings per hour is not much above the background rate.

## **VARIABLE STAR**

You might like to pay particular attention to **Algol**, the eclipsing variable in the constellation of Perseus, on the evenings of September 4<sup>th</sup>, 24<sup>th</sup>, and 27<sup>th</sup>. These are occasions of minimum brightness this month, when the darker component of the binary passes in front of the brighter star, and the apparent magnitude drops from the usual +2.1 to +3.4. This of course happens on a regular basis, but not all minima are observable from the British Isles. In fact, there was no favourable occasion for observing a minimum during the whole of April, May and June this year (and only one occasion in each of March and July).

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## DIARY DATES

### Meetings of the Nottingham Astronomical Society

Our programme of meetings over the coming months is below.  
Don't forget to check our website: <http://beehive.thisisnottingham.co.uk/nottinghamastro>  
for the latest updates and details of Observatory work sessions.

#### **Thursday 1 September 2005**

**Djanogly City Academy 7.30pm**

**"Why galaxies look the way they do: The origin of galaxy morphology"**

Dr Alfonso Aragon-Salamanca  
University of Nottingham

#### **Thursday 6 October 2005**

**NAS Observatory site from 7.30pm**

**Observatory Evening**

All members and guests are welcome. For directions please e-mail

[nottinghamastro@yahoo.co.uk](mailto:nottinghamastro@yahoo.co.uk)

(There is **no** Society event at Djanogly this evening.)

#### **Thursday 3 November 2005**

**Djanogly City Academy 7.30pm**

**NAS Annual General Meeting 2005**

#### **Thursday 1 December 2005**

**Djanogly City Academy 7.30pm**

**"Cosmic Collisions"**

Dennis Ashton

Director, Sheffield Hallam University Star Centre

#### **Thursday 5 January 2006**

**Djanogly City Academy 7.30pm**

**Members' Evening**

#### **Thursday 2 February 2006**

**Djanogly City Academy 7.30pm**

**"The Discovery of Pluto"**

Martin Lunn MBE

A selection of astronomy books will also be on display to browse and buy if you wish.

**DIARY DATES (2)**  
**Other Events**

**9, 10 & 11 September 2005**  
**The Herstmonceux Science Centre**  
**Astronomy Festival 2005**

**“THE BIGGEST ASTRONOMY WEEKEND IN THE UK”**

Includes viewing through the historic telescopes on Friday & Saturday evening (weather permitting), daily programme of lectures, tours around the telescopes, solar telescope, trade stalls & over 90 hands-on science exhibits.

Herstmonceux Science Centre, East Sussex.

Details: [www.the-observatory.org/](http://www.the-observatory.org/)

**Science Museum IMAX cinema, London**  
**Showing from 23 September** (tickets are already on sale)

*“Only 12 have walked on the Moon – now you’re next!”*

**MAGNIFICENT DESOLATION: WALKING ON THE MOON 3D**, will take audiences to the Moon to walk alongside the Apollo astronauts who have stepped upon its surface. With never before seen photographs, CGI renditions of the lunar landscape and previously unreleased NASA footage, audiences will be immersed in the life-changing experiences of these astronauts by showcasing what they saw, heard, felt, thought and did while on the lunar surface.

The film's content is based on "The Lunar Surface Journals," a massive archival database compiled over the last decade by Dr. Eric Jones, which chronicles the moon walks as recounted by the astronauts.

Full details are available at: [www.sciencemuseum.org.uk/imax/coming\\_soon.asp](http://www.sciencemuseum.org.uk/imax/coming_soon.asp)

and the IMAX website: <http://www.imax.com/magnificentdesolation/>

**Saturday, 12 November 2005**  
**Leeds Astromeet**

Doors open 9.00 am

First speaker 10.00 am, Last speaker 5.10 pm

Tickets on the door: £8.00

Venue: **Rupert Beckett Lecture Theatre, Leeds University**

see <http://tldynamic.leeds.ac.uk/leisure/detail.asp?ID=193>

The 10th Anniversary of the 'Leeds Astromeet', which is justly regarded as one of the premier events in the national amateur astronomy calendar.

Speakers: Professor John Dyson "Starburst Galaxies"

Professor Lionel Wilson "Recent findings on the Interaction between Volcanoes and Water on Mars"

Professor Sir Arnold Wolfendale "Albert Einstein: a Scientific Genius"

Professor Clive Ruggles - topic to be announced

Dr Allan Chapman "Thomas HEC Espin (1858-1934): Grand Amateur Astronomer, Philanthropist and Eccentric"

Further details can be found on the Leeds Astronomical Society website:

<http://www.leedsastronomy.org.uk>

## Small Advertisements

### For Sale

**Maksutov 6-inch by Drew.** 2x2-inch finderscopes, equatorial tripod mount with circles, eyepiece tray, carry box. Selection of eyepieces, Barlow lens, star diagonals.

Buyer collects. **£495** for prompt sale.

**Telephone Peter Davison  
on 0115 923 0040**

### For Sale

**8¾-inch Newtonian telescope on  
Dobsonian mount**

Built by David Lukehurst.  
65x and 250x eyepieces, finderscope.  
3 years old.  
Hardly used, very good condition.

**£375** or near offer

**Telephone Terry Naylor  
on 0115 9815968**

## The Widescreen Centre

18, LADY BAY ROAD ,Nottingham, NG2 5BJ

0115 945 5459 FAX: 0115 945 5362

WebShop: [www.widescreen-centre.co.uk](http://www.widescreen-centre.co.uk)

[www.telescopes-direct.com](http://www.telescopes-direct.com)

eMail: [call@widescreen-centre.co.uk](mailto:call@widescreen-centre.co.uk)

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You are always made welcome at our shop or a telephone call to Lynda will bring you our latest catalogue

## 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](mailto: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

*The Nottingham Astronomical Society, and/or the Editor accept no responsibility for any errors that may occur within this publication. Any views expressed in the NAS Journal are those of the individual authors and not necessarily endorsed by the Nottingham Astronomical Society, its Committee or Members.*

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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 £24
- Junior (17 years or under) £12
- Concession (*full time student, UB40, etc*) £12

# 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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## **PRESIDENT:**

**Greg Eisenhauer**

Tel: 01949 875857

e-mail: [greg.eisenhauer@ntlworld.com](mailto:greg.eisenhauer@ntlworld.com)

## **HONORARY VICE PRESIDENT**

**Alan Heath** (Ex. Dir. BAA Saturn Section)

## **VICE PRESIDENTS:**

**David Lukehurst**

e-mail: [gildor@ntlworld.com](mailto:gildor@ntlworld.com)

website: [www.dobsonians.co.uk](http://www.dobsonians.co.uk)

**Dr Roy Gretton**

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**Paul Stocks**

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e-mail: [nottinghamastro@yahoo.co.uk](mailto:nottinghamastro@yahoo.co.uk)

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## **CURATOR OF INSTRUMENTS**

**David Lukehurst**

e-mail: [gildor@ntlworld.com](mailto:gildor@ntlworld.com)

## **CAMPAIGN FOR DARK SKIES:**

**Greg Eisenhauer**

## **ORDINARY COMMITTEE MEMBERS:**

**Joe Sowerby**

**Dorothy Sowerby**

**Fred Hopper**

email: [fwmh@nerc.ac.uk](mailto:fwmh@nerc.ac.uk)

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## **Meetings**

Formal monthly meetings, with speakers, are held on the first Thursday of each month (except August, and occasionally other months as announced) at

*Djanogly City Academy*

Sherwood Rise, Nottingham NG7

Doors open	7.30pm
Meetings Start	7.45pm
Meetings end	10.00pm

**Non-members** are very welcome at our meetings and there is no charge for the first meeting. We make a small charge of £2.50 adults, £1.25 juniors to non-members after their first attendance. Invited guests are admitted free of charge.

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## **Annual Subscriptions, 2004-05**

Full Adult:	£24
Junior ( <i>17 years or under</i> )	£12
Concessions	£12

(*Full time student, UB40, etc*)

Subscriptions become due on 1 October. Half-price subscription is charged if joining after 1st April. Please make cheques payable to:  
**Nottingham Astronomical Society.**

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If you would like further information about the **Nottingham Astronomical Society**, or would like to become a member, please contact the Honorary Secretary, Paul Stocks, at the address given above, 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.

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