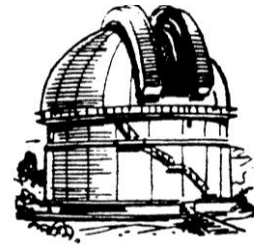


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# Journal

of the



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## Nottingham Astronomical Society

December 2004

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**Inside this issue**

- Sky Notes for December
- Diary Dates
- Darkest Time of the Year
- Advertisements
- E-Services
- Membership application form

**Thursday 2<sup>nd</sup> December**

at the Djanogly City Technology College

*Doors open from 7.30pm*

**James Ince**

of

**Bassetlaw Astronomical Society**

will be speaking on

## **X-Planes and Lifting Bodies**

### **An (almost) naked eye comet**

Comet 2004 Q2 (Machholz) is moving northwards and will be in the constellation of Taurus by the end of this month. While not a particularly bright comet, it is expected to be at magnitude 5, and so, theoretically at least, will be a naked eye object from dark locations. Realistically, expect to require the aid of binoculars.

# Sky Notes

## 2004 December

Compiled by Roy Gretton

*All times quoted are U.T.*



### PHASES OF THE MOON

Last Quarter	5d 00h 53m
New Moon	12d 01h 29m
First Quarter	18d 16h 40m
Full Moon	26d 15h 06m

### THE PLANETS

**Mercury** passes through inferior conjunction on December 10<sup>th</sup>, and then becomes a morning object, reaching greatest western elongation (22°) on December 29<sup>th</sup>, when it should be fairly easy to find as it will be about one degree away from Venus.

**Venus** is still bright in the morning sky, although it is moving closer to the Sun. Its elongation will have diminished to about 20° by the end of the year. The phase is now greater than 90%. Venus will be three degrees north of the Moon on the 10<sup>th</sup>.

**Mars** is slowly moving away from the Sun in the morning twilight, but its elevation is only ten degrees at sunrise, and its diameter only four arcseconds, so it continues to be very difficult to observe.

**Jupiter** is a bright morning object, and will be almost due south at dawn. Its magnitude will rise to -2 by the end of the month, and it will be less than half a degree from the Moon on the 7<sup>th</sup>.

**Saturn** continues to be a prominent object (magnitude -0.2) in the morning sky, below the bright stars Castor and Pollux in Gemini. The Moon will be 5° away from Saturn on December 28<sup>th</sup>.

**Uranus** and **Neptune** are becoming harder to observe as the year closes. Neptune at magnitude 8 is a difficult object, low down in the west after sunset. Uranus (magnitude 5.7) is easier to find in binoculars, being rather higher in the sky than Neptune, and about two degrees to the west of sigma Aquarii.

## **METEORS**

One of the best meteor showers of the year is reserved for December. The Geminids can be seen during the second week on the month, but are expected to be at their maximum activity on the night of 13<sup>th</sup> – 14<sup>th</sup>. This year conditions are particularly favourable, with absolutely no interference from moonlight (New Moon being on the 12<sup>th</sup>). The Geminid radiant is due south about one hour after midnight, at an altitude of 70°. Under ideal conditions you may be able to see more than 100 meteors in an hour.

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## **The “Darkest” Time of Year**

The Winter Solstice (the date when the Sun lies furthest south in Earth’s skies) occurs this year on December 21<sup>st</sup>. It occurs on either the 21<sup>st</sup> or 22<sup>nd</sup> of December, depending largely on the timing of leap years.

The solstice fell on December 21<sup>st</sup> in 1997, 2000 and 2001, but on December 22<sup>nd</sup> in 1998, 1999, 2002 and 2003. Next year it will be on the 21<sup>st</sup> again.

The insertion of an extra day (February 29<sup>th</sup>) into a year means that astronomical events later that year will tend to fall on earlier dates than would otherwise be the case.

The nearest approach of Earth to the Sun (perihelion) occurs this winter on January 2<sup>nd</sup>, when we shall be 147 million kilometres from our star. Last winter this event occurred on January 4<sup>th</sup>.

## DIARY DATES

### Meetings of the Nottingham Astronomical Society

#### **Thursday 2 December 2004**

Djanogly CTC  
Doors open 7.30pm  
“X-Planes and Lifting Bodies”  
James Ince  
Bassetlaw Astronomical Society

#### **Meetings in 2005**

#### **Thursday 6 January 2005**

Djanogly CTC  
Doors open 7.30pm  
**Members' Evening**

#### **Thursday 3 February 2005**

Djanogly CTC  
Doors open 7.30pm  
“The Disclosure Project”  
(UFOs and extra-terrestrial intelligence)  
Andrew Johnson  
[www.disclosureproject.org](http://www.disclosureproject.org)

#### **Thursday 3 March 2005**

Djanogly CTC  
Doors open 7.30pm  
(Topic and speaker to be arranged)

#### **Thursday 7 April 2005**

Djanogly CTC  
Doors open 7.30pm  
“Nottinghamshire, a Heavenly County”  
Madeline Cox  
Bassetlaw Astronomical Society

**Meetings at Djanogly CTC will also be held on the following dates in 2005, from 7.30pm:**

5 May, 2 June, 7 July, 1 September, 3 November.  
Details of topics/speakers will appear in future issues of the NAS Journal.

On **6 October 2005**, the meeting will be at the Society's observatory site.

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

Djanogly CTC  
*Doors open 7.30pm*  
“Cosmic Collisions”  
Dennis Ashton  
Director, Sheffield Hallam University Star Centre

DIARY DATES continued

**Other events**

**Christmas Events at the National Space Centre,  
Leicester**

**11th & 12th December 2004**

18th December 2004 – 3rd January 2005

**‘Santa Science’**

Within the laws of physics, could Father Christmas really get round all those houses? This fun, interactive presentation for all the family will explore this and other Christmas science.

*Free to all Space Centre Ticket Holders throughout the day at ‘Space Now’*

**Make Your Own ‘Spacey’ Christmas tree Decoration**

Charged workshops held at allotted times on the day.

All events are subject to availability.

Please contact National Space Centre bookings on 0116 258 2111 for more information.

Friday February 4th & Saturday February 5th 2005

Kensington & Chelsea Town Hall

Hornton Street, London

(Nearest Tube station is High Street Kensington on the Circle and District lines)

**European *Astrofest* 2005**

**“The Universe comes to London”**

*Conference programme details:*

[www.astronomynow.com/astrofest/](http://www.astronomynow.com/astrofest/)

Ticket Hotline 01732 367542

1st October 2005 (*provisional date*)

Institute of Astronomy, Cambridge

**Federation of Astronomical Societies  
Convention 2005**

## 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**

## The Widescreen Centre

18, LADY BAY ROAD ,Nottingham, NG2 5BJ  
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[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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## The Nottingham Astronomical Society: E – SERVICES

### *The Journal*

To register for your FREE Journal, just E-mail Carl Brennan at [carl.stella@virgin.net](mailto:carl.stella@virgin.net) - You don't have to be a Society member to take advantage of this service.

### *Observatory Group*

A web group page and message service has been set up at

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

It will be used for circulating information about the observatory construction and projects, large telescope up-dates, and use of the site by members of the Observatory Group. Please visit the web site and E-mail on line if you wish to join (NAS Members only)

### **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, it's 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:**

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

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

## **VICE PRESIDENTS:**

**David Lukehurst**

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## **CURATOR OF INSTRUMENTS**

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## **CAMPAIGN FOR DARK SKIES:**

**Greg Eisenhauer**

## **ORDINARY COMMITTEE MEMBERS:**

**Joe Sowerby**

**Dorothy Sowerby**

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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 Technology College*

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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