

Public Observing at the Institute of Astronomy – 6th December 2006

Institute of Astronomy <http://www.ast.cam.ac.uk/IOA/>

& Cambridge Astronomical Association <http://www.caa-cya.org/home/index.php>

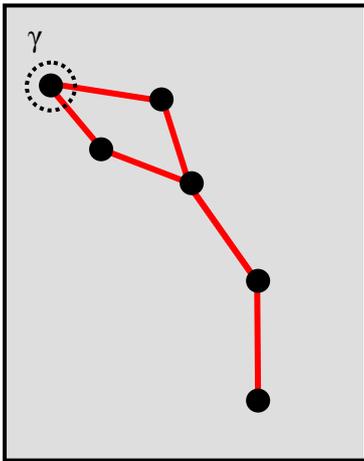
Any comments or suggestions please to **Carolyn Crawford** (csc@ast.cam.ac.uk)

Welcome to our public open evenings which run every Wednesday throughout the winter season. The talk schedule for the coming term can be found at <http://www.ast.cam.ac.uk/IOA/public/0607timetable.html>

This week's talk : *Andrew Pontzen on Are computers consummate calculators of the cosmos?*

Next week's talk : *Anthony Challinor will be Looking back to the dawn of time with the cosmic microwave background*

Astronomical object of the week : *Gamma Delphinus* is a beautiful double star, where the two components are wide enough apart to be resolved by binoculars or a small telescope. You can still catch it in the west just above the lowest point of the summer triangle; it lies at one end of the tiny constellation of Delphinus, the Dolphin (see the diagram on the left). The slightly brighter star is clearly a golden-yellow colour, but the secondary is described by observers as any of white or grey or green! The system lies about 100 light-years distant from us.



Website of the week : The Space Shuttle *Discovery* is due for launch tomorrow. Find out more about its mission at http://www.nasa.gov/mission_pages/shuttle/main/index.html

Some early evening **Iridium flares** will be visible from Cambridge in the next week (well, assuming the clouds don't get in the way, that is). These are flashes of reflected sunlight off communication satellites in orbit above the Earth. Look at the time listed, and in the general direction given by the altitude and direction; watch out for a briskly moving 'star' that quickly grows to a peak brightness and then fades away. Do try and look for these if it's clear, it's always amazing to see them appear bang on schedule!

Day	Time	Altitude	Direction
08 Dec	17:15:39	26°	SSW
09 Dec	17:09:34	26°	SSW
11 Dec	17:06:52	23°	SSW

For more details (or to get exact times and positions if you don't live in Cambridge) go to www.heavens-above.com

Targets we intend observing tonight (if it's clear)

Modern 14-inch (35 cm) telescope

- Albireo**; a double star where the two stars have distinctly different colours of blue and yellow
- M57**; the famous Ring nebula in Lyra
- Garnet Star**; a red supergiant star, and one of the most luminous and largest stars that can be seen with the naked eye
- Algol** ; a binary system where one star eclipses the other to produce variations in brightness
- The Moon**
- Gamma Delphinus**; a beautiful double star that is our object of the week

Modern 8-inch (20 cm) telescope

- M15**; a globular cluster of stars
- M27**; the Dumbbell, a planetary nebula
- Eta Cassiopeia**; double star where the two components again have very different colours of yellow and red
- Delta Cepheus**; a star that varies in brightness
- M1** ; the 'Crab' nebula, a famous supernova remnant

Wide angle camera (showing what can be seen in binoculars)

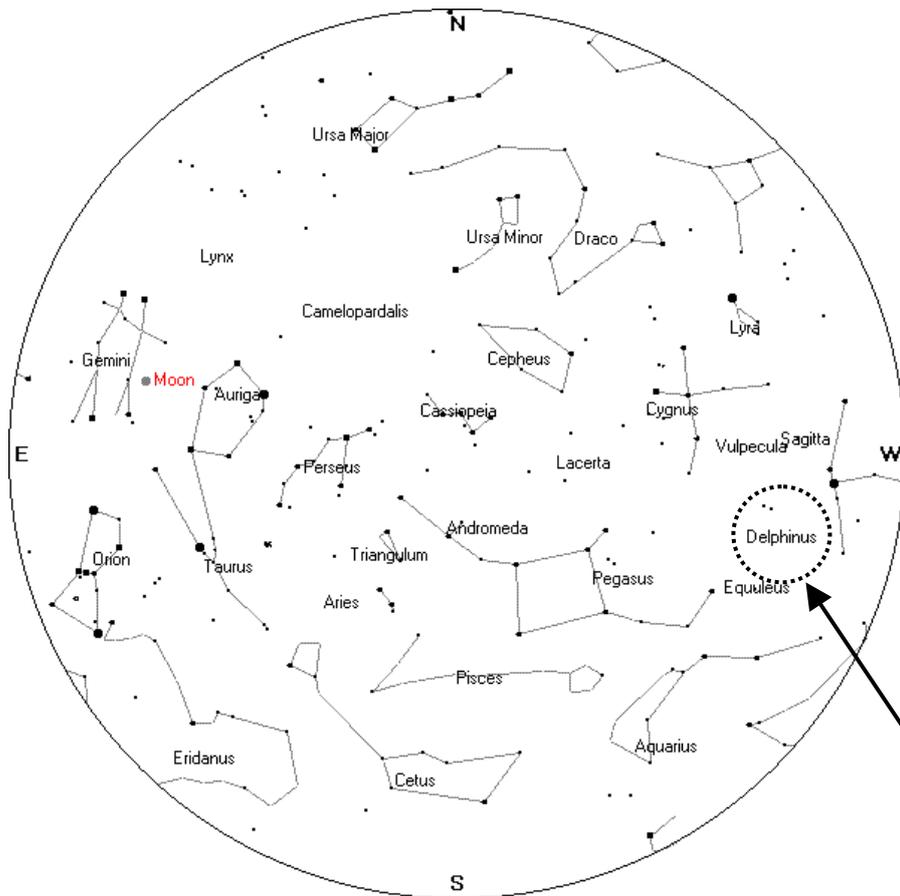
- The constellations of **Taurus**, **Delphinus** and **Perseus**
- **M45**; the **Pleades** star cluster
- The **Moon**
- The open clusters of stars the **Hyades**

The historic 12-inch Northumberland and 8-inch Thorowgood telescopes

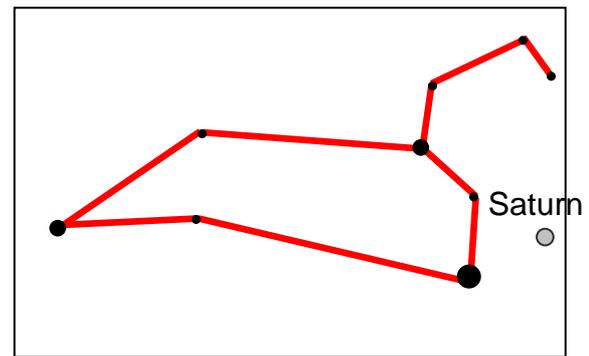
- **M15**; a globular cluster of stars
- **Gamma Delphinus**; a double star

Chart of the night sky from Cambridge for 8pm on Wednesday 6th December

(taken from www.heavens-above.com)



Saturn rises now after 9.30pm, and can be seen in the constellation of Leo deep in the east; it's just to the right of the last and brightest star in the 'backwards question mark' that forms the Lion's head:



Delphinus – for gamma delphinus

And finally, a **site map** to help you find your way back to the car in the dark if we are observing tonight.

- Alternative parking here
- Public observing happens here
- Enter the IoA here for the talk
- You have probably parked here
- suggested route back to the car park

