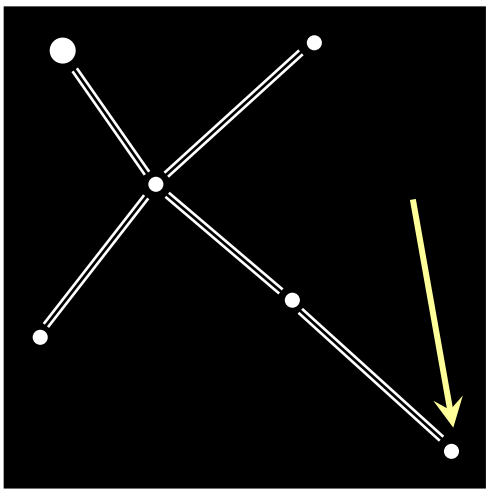
Public Observing at the Institute of Astronomy − 25th October 2006

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 **Carolin Crawford (csc@ast.cam.ac.uk)**

Welcome to our public open evenings, which will be running 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 : Natasha Maddox will be telling us *How to find a quasar*

Next week's talk : Michael Fellhauer will be talking about *Galactic Cannibalism: How the Milky Way eats its dwarf companions*



Astronomical object of the week : Albireo
Albireo (beta Cygni) is the star that marks the 'head' of the summer constellation of Cygnus the swan, and is actually a double star with the two components easily separable in a small telescope. The two stars have strikingly different colours of blue and gold, and lie about 380 light-years distant. Such 'binary' stars are very common throughout the Galaxy, and orbit each other, bound together by their mutual gravity. But it doesn't stop there… the brighter (golden) 'star' is itself a very close pair, but it needs a much more powerful telescope to separate it out.

Website of the week : *www.life-on-mars.org*
No, it's not the TV programme, but a fun website all about Mars, with a neat picture gallery included. Best of all, click on 'fly me there' and watch a couple of virtual reality movie tours of Mars.

Some early evening **Iridium flares** will be visible from Cambridge in the next week. 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' (crossing the whole sky in about a minute) 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*
26 Oct	18:00:46	40°	SSW
26 Oct	19:36:20	48°	SE
27 Oct	19:30:21	46°	SE
29 Oct	16:48:54	36°	SSW
29 Oct	16:51:57	35°	SSW
30 Oct	16:45:53	34°	SSW
31 Oct	05:02:59	36°	N
31 Oct	18:15:21	46°	SSE

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

And there are lots of opportunities coming up to see the **International Space Station** going overhead in the early evenings over the next week. Look for a faint star moving steadily across the sky as follows:

Day	*start time*	*altitude & direction*	*end time*	*altitude & direction*
26 Oct	18:34:26	10 WSW	18:39:26	14 E
26 Oct	20:09:19	10 W	20:10:44	26 W
27 Oct	18:55:54	10 WSW	19:00:07	27 E
27 Oct	20:30:54	10 W	20:31:24	14 W
28 Oct	19:17:26	10 W	19:20:45	57 ESE
29 Oct	17:03:57	10 WSW	17:09:38	10 E
29 Oct	18:38:56	10 W	18:41:22	55 WSW
30 Oct	17:25:25	10 W	17:30:42	13 E
30 Oct	19:00:27	10 W	19:01:59	26 WSW
31 Oct	17:46:51	10 W	17:51:20	22 ESE
31 Oct	19:22:05	10 W	19:22:37	13 WSW
01 Nov	18:08:17	10 W	18:11:59	29 SSE

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

Targets we intend observing tonight (weather permitting … at time of press it's not hopeful!):

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

- The constellations of **the Plough, Lyra, Aquila** and **Cygnus**
- **The Andromeda galaxy** and its companion galaxies M31 and M32

Modern 14-inch (35 cm) telescope

- **M57**; the famous Ring nebula in Lyra, and last week's object of the week
- **Albireo**; a double star and our object of the week
- **Eta Cassiopeia**; a double star where the two components again have very different colours of yellow and red

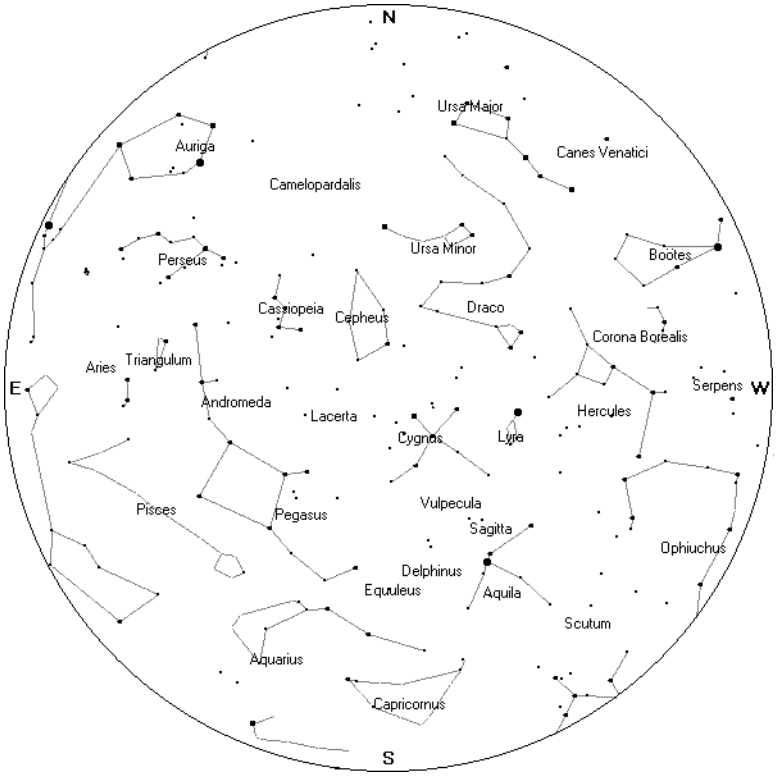
Modern 8-inch (20 cm) telescope

- **M13**; the great globular cluster in Hercules
- **M27**; the Dumbbell, a planetary nebula
- **M92**; another bright globular cluster of stars in Hercules

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

- **Collinder 399**; an open cluster of stars, whose brightest members take the shape of a coathanger!
- **M57**; the famous Ring nebula in Lyra, and our object of the week
- **Albireo**; a double star and our object of the week
- **The Andromeda Galaxy** ; the nearest Spiral galaxy to the Milky Way

Chart of the night sky from Cambridge for 8pm on Wed 25th October (taken from *www.heavens-above.com*)



No planets are on view to the naked eye at this time of year, unfortunately.

The *summer triangle* (imagine a right-angled triangle linking the brightest star in each of the constellations of Cygnus, Aquila and Lyra) is still visible in the sky, but now setting towards the West.

The autumn constellations of Andromeda and Pegasus are easily visible now

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