Public Observing at the Institute of Astronomy
21st February 2007

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*)

The talk schedule can be found at
http://www.ast.cam.ac.uk/IOA/public/0607timetable.html

This week's talk : *Elena Belsole* is telling us about *Cosmic Collisions*
Next week's talk : *Virginia Corless* will be *Illuminating the Invisible: Dark Matter in the Universe*

Astronomical object of the week :
Iota Orionis, a quadruple star system

Iota Orionis also has the name *Na'ir al Saif*, Arabic for 'the Bright One in the Sword', which indicates how easy it is to find. It's the end and brightest star of the sword that hangs from Orion's belt, lying just to the south of the Great Orion Nebula. The dominant star is very bright, and has a mass about 15 times that of our Sun. It has two obvious companions, which orbit around the centre of mass of the system – one with a period of 70,000 years, the other with a period of 700,000 years. The brightest star is itself a close double – that you cannot separate with a telescope – with the two components orbiting around each other every 29 days.

There are lots of chances for early evening sightings of the **International Space Station** during the coming week: Look for a faint star moving steadily across the sky as follows:

Day	*start time*	*altitude*	*& direction*	*end time*	*altitude*	*& direction*
22 Feb	18:38:56	10	W	18:43:22	25	ESE
22 Feb	20:13:58	10	W	20:14:35	14	W
23 Feb	18:59:11	10	W	19:02:56	37	SE
24 Feb	19:19:27	10	W	19:22:31	33	S
25 Feb	18:04:37	10	W	18:10:22	10	ESE
25 Feb	19:39:55	10	W	19:42:07	19	SSW
26 Feb	18:24:47	10	W	18:30:14	10	SE
27 Feb	18:45:06	10	W	18:49:38	10	SSE
28 Feb	19:06:28	10	SW	19:07:39	10	SSW

There are also several **Iridium flares** in the early evening: the ones in italics should be especially bright

Day	*start time*	*altitude*	*& direction*
22 Feb	18:09:37	59°	NNE
22 Feb	20:17:00	13°	N
23 Feb	18:03:28	61°	NNE
23 Feb	18:05:59	62°	NNE
23 Feb	20:10:36	17°	N
24 Feb	17:57:23	62°	NNE
24 Feb	*20:03:46*	*20°*	*N*
25 Feb	*17:53:22*	*65°*	*NNE*
25 Feb	*19:57:24*	*23°*	*N*
26 Feb	19:51:04	25°	N

For more details or the exact timing from somewhere other than Cambridge, look at www.heavens-above.com

Tonight we intend to show you the following astronomical objects (weather permitting, of course):
Modern 14-inch (35 cm) telescope

- **The Moon**
- **Saturn** and some of its brighter moons
- **Iota Orionis** : a multiple star system; and this week's object of the week
- **Canis Major SAO 173349 :** a beautiful double star, with one component orange, and the other blue
- **Iota Cancer** : another double star

Modern 8-inch (20 cm) telescope

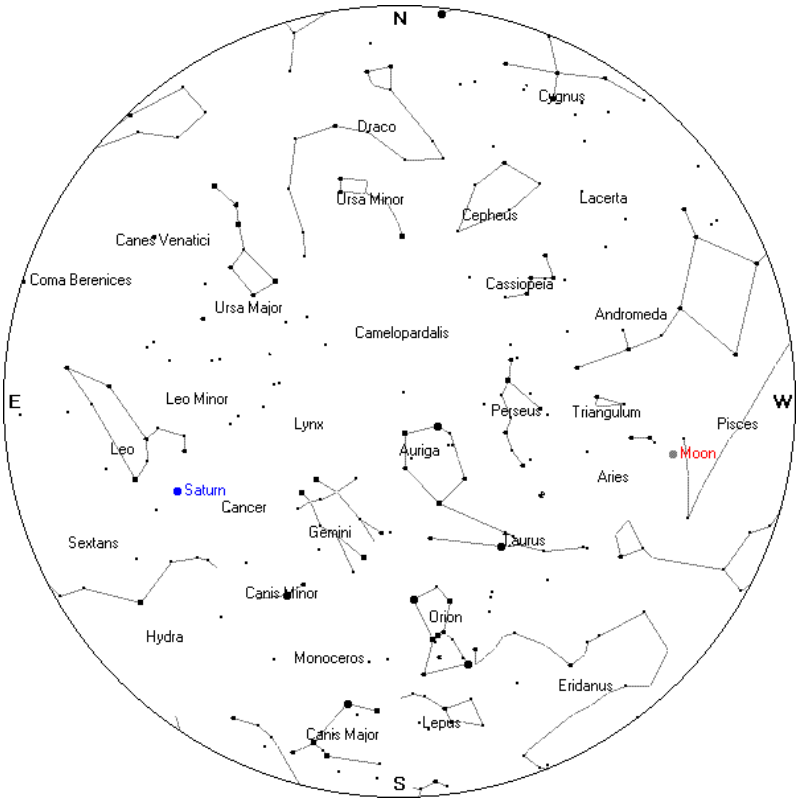
- The **Moon**
- **Saturn** and some of its brighter moons
- **M42** : the 'great' nebula in Orion's sword
- **M97 :** the 'owl' planetary nebula in the constellation of the Plough
- **M108** : a spiral galaxy in Ursa Major

The wide angle camera

- The **Moon**
- The constellation of **Aries**
- **M45 :** the Pleaides open star cluster

Chart of the night sky from Cambridge for 8pm on Wednesday 21st February

(taken from *www.heavens-above.com*)



You can see **Venus** to the West every evening after sunset until about 7.45pm – it appears as a really bright 'star' above the horizon.

Saturn is now easily visible in the night sky, bright and high in the constellation of Leo towards the south-east.

If you are an early riser, you can catch **Jupiter** bright towards the south-east in the morning twilight. It rises at 3am.

The **Moon** is a beautiful crescent tonight, setting at 11pm.

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