

PUBLIC OPEN EVENINGS AT THE INSTITUTE OF ASTRONOMY

WEDNESDAY 28TH JANUARY 2009

Institute of Astronomy

<http://www.ast.cam.ac.uk>

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

All comments, enquiries or suggestions please to **Carolin Crawford** (csc@ast.cam.ac.uk)

Welcome to our Wednesday public open evenings. Tonight's 30 minute talk starts at 7.15pm and is followed by an opportunity to observe with both modern and historical telescopes *if* the weather is clear. Ha, ha.

Rain, cloud and more rain As I type this and look out the window at the rain streaming down, it doesn't look hopeful for tonight. Yes, we're all pretty fed up with it too; the CAA guys have a new telescope that they're itching to demonstrate. We don't know why Wednesdays seem fated this season; usually we can rely on clearer weather in the spring term than during the autumn. We have been unusually unlucky though – only 2 out of 13 open nights have been clear so far. In previous years the percentage of 'observing' nights has run between 30 – 50%, not counting a staggering 64% clear nights last season (obviously it's 'pay-back' time). In recompense (=desperation?) we're pushing our observing season through to the end of March, and throwing in a couple of extra nights during 'MoonWatch' week, on the 3rd and 4th April.

So you see (a) why we don't build huge optical telescopes in Cambridge any more and (b) why we run the programme of talks! So sit back, relax, and enjoy tonight's talk, which I guarantee will be entertaining.

This week's talk : Andrew Pontzen is revealing **The Fuzzy Universe**

Next week : Mark Booth will be exploring **The Solar System beyond Neptune**

The schedule for this term's talks can be found at:

http://www.ast.cam.ac.uk/public/public_observing/0809/timetable.html

The CAA guys have also been working hard on installing a new **all-sky camera**, which monitors the sky from the roof of the historical observatory building. Have a look at it on <http://tel05.ast.cam.ac.uk/> to see the live view, or run the movies from the last couple of nights to get sped-up views showing the cloud boiling around, stars wheeling around the sky, plane and satellite trails, and then more cloud scudding in from the west. Soon it will be shifted to a slightly different location on the roof with a view of more of the sky.

SITE SAFETY As if we weren't having enough fun with too much weather, the construction work for the new Kavli Institute for Cosmology is beginning to encroach on the accessibility of the telescopes. So if we're observing (ha) then I'm afraid access to the observing will be across the gravel car park. So please be safe, and follow directions and instructions as the usual path by the domes is completely blocked. Apologies about this, but I'm told it shouldn't be for too many weeks. But do please ask any of the front-of-house staff if you need further orientation or assistance.



Enough of all that, how about some astronomy!

There are four nice new videos where one of the NASA astronauts currently on board the **International Space Station** takes you on a guided tour of the facility, showing what life is like on board. You can access them through the ever-informative *Universe Today* website at <http://www.universetoday.com/2009/01/26/take-a-personal-tour-of-the-iss/>

There are plenty of opportunities to actually observe **International Space Station** fly overhead during the early evening sky over next week. To get the best viewing times and direction for your observing location, look it up in www.heavens-above.com. And whilst you're there, don't forget to check out the site for any bright iridium flares coming up in the next week.

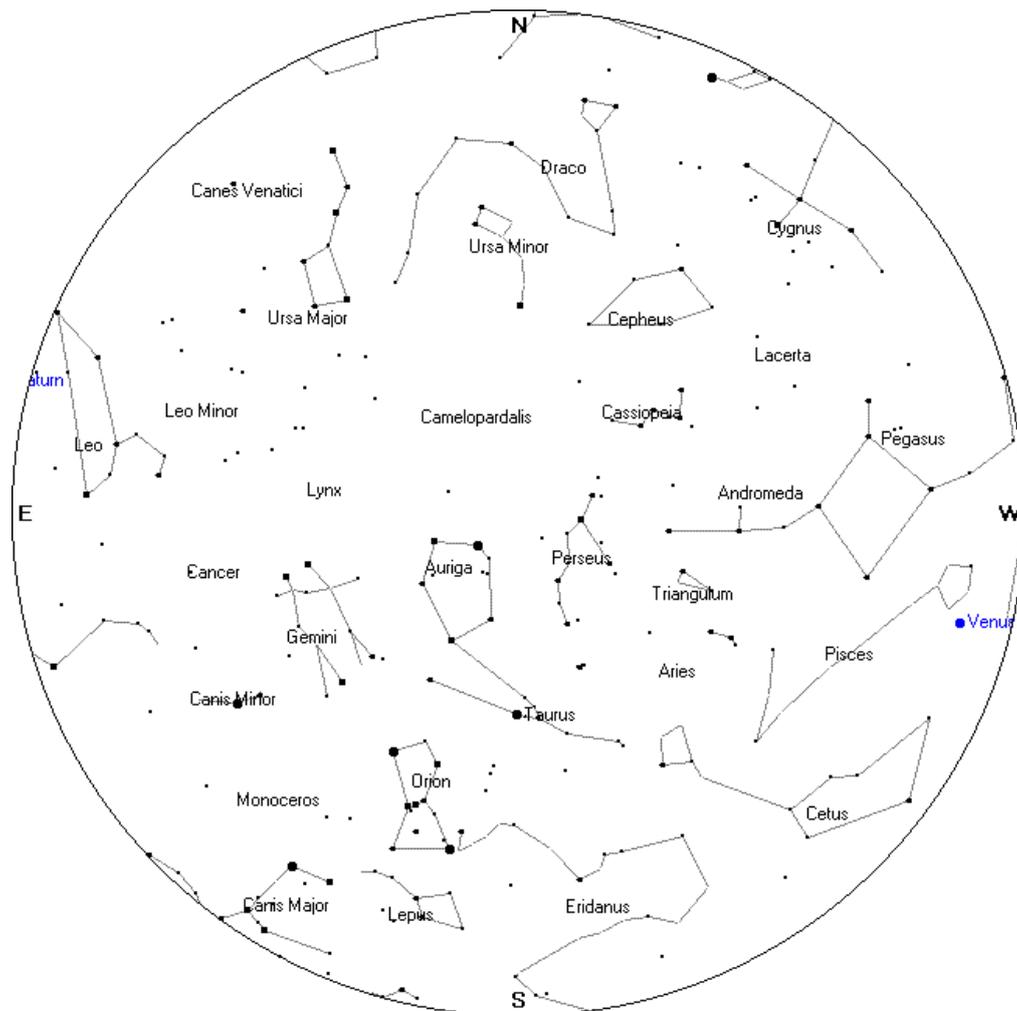
Venus continues to outshine everything in the twilight sky, over to the south-west before 7.30pm. It's easy to spot tomorrow (29th) as it'll be just above and to the left of the crescent moon; and will be below the moon on the 30th. **Saturn** will be visible towards the east after around 10.30pm. **Orion** the hunter dominates the Southern sky; follow the line of the three stars that make up his belt to find **Sirius**, the brightest star in the sky, sparkling brightly low down near the horizon.

We always thought that the **ice caps on Mars** were mainly carbon-dioxide ice, with just a smattering of water ice. French astronomers have published some new results from a radar experiment on the *Mars Reconnaissance Orbiter* (one of the spacecraft currently in orbit around Mars) that suggest instead that the Northern polar cap is almost completely comprised of water ice – along with some deposits of dust (not surprising given the strong winds that blow round the desert planet). They estimate that there could be 2-3 million cubic km of water ice within that first 1km of Mar's crust.

THE NIGHT SKY AT 8PM ON 28TH JANUARY 2009

To use the map, hold it above your head to match the sky...

Sky map courtesy of <http://www.heavens-above.com/>



What happens when poets and astronomers meet?

The Institute of Astronomy is hosting a special evening to celebrate the recent publication of a book called *Dark Matter: the poetry of space* on **Thursday 5th February**. Astronomers Jocelyn Bell Burnell and Paul Murdin will be in conversation with the poets James Fenton and Maurice Riordan; there will also be readings from the book. The event will be chaired by the Director of the Gulbenkian Foundation's art programme, Sian Ede. The event begins promptly at **7pm** and the main entrance doors will be open by 6.45pm. Entrance is free, and seating will be on a first-come, first-served basis.

It is particularly apt that this event is held at the Institute of Astronomy, as this was for many years the workplace of Becky Elson, a talented astronomer *and* poet. If you're interested in where science meets art, you could always check out her collected writings *A responsibility to awe* published by Oxford Poets.

