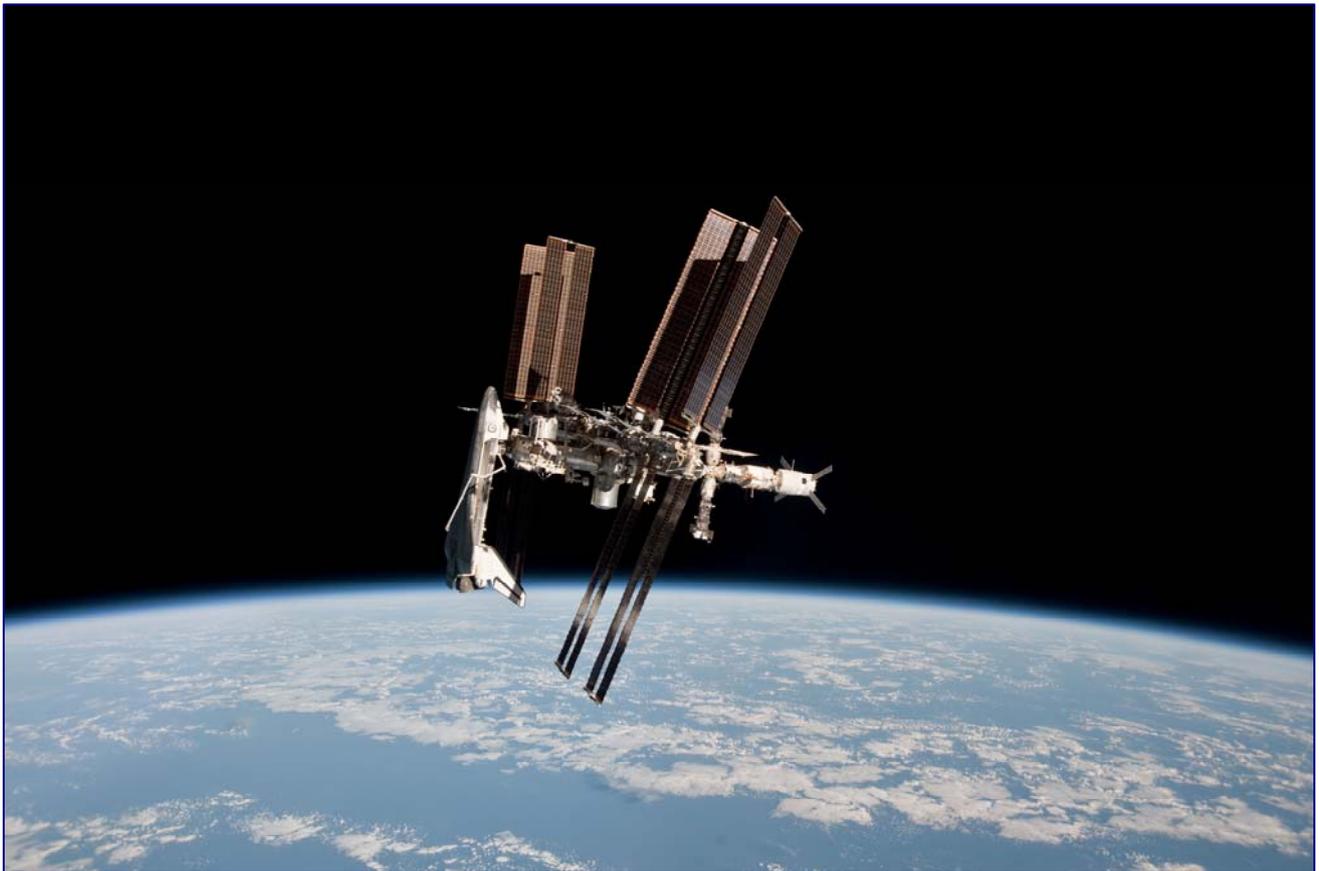


2002



NEXT MEETING
THURSDAY, 16th June 2011
THE ASTRONOMICAL SOCIETY OF HARINGEY
VOLUME 39 : ISSUE 8 : JUNE 2011

SOCIETY NEWS

MEETING VENUE :
Ashmole School, Southgate, London N14 5RJ.

The day for all meetings is usually the third Thursday of each month. The exceptions are August, when currently we do not hold a meeting, and December, when the Christmas Meet has always traditionally been held during the second week. However, in case of changes – and there have been a few over the last year or so – it is always advisable to double-check the dates below.

Doors open - 7.30pm : Main speaker - 8.00pm. Finish - 10.00pm

2011

OK, the programme for this coming year is *still* being finalised, though we still aim to have a number of our regular speakers throughout the rest of the year, and some new ones.

The dates currently scheduled are as follows, though some may have to be changed due to school holidays.

June 16th : First Orbit : Yuri Flight in real time

July 21st

August - Summer Break

September 15th

October 20th AGM

November 17th

December 8th Christmas Party and Guiz VII

The Committee is however looking at whether it is worth continuing doing the Party, either on the traditional December date, or - as happened this year - in January, (especially as that was not very well attended). Any feedback from the Society would be welcome - either by letter or phone to the Chairman, (details back page), or email to <info@ashastro.org.uk>

COVER

Although the cover picture does not seem all that unusual - we have seen photos of the International Space Station and a Shuttle Orbiter in orbit before - but the significant point there is that you have both in the same image, so it could only have been taken from a Soyuz, which is the case. It was photographed from the departing Soyuz TMA-20, and actually photographed by Italian ESA astronaut Paola Nespoli, who was the main Director of Photography for the movie *First Orbit*, to be shown at the next meeting. This is the last opportunity to photograph *Endeavour* as it was the final mission for this Orbiter - and the penultimate Shuttle flight.

As one of those odd pieces of information it is reckoned that Nespoli is the tallest person to fly on a Soyuz, as he is 188cm / 6'2" in height!

Photo - NASA

SOCIETY NEWS

We meet in what is now the Music Room at Ashmole School. (This was the Curriculum Support Building - and still noted as such in the map.) This is the low building, (in the centre of the photo), just past the Performing Arts Centre and opposite the main entrance to the technology block.



MEETING PREVIEW : June 16th **First Orbit : The Flight of Yuri Gagarin - in real time**

first orbit
a free film
to download & share,
created to celebrate the first
50 years of human spaceflight.

LIFTS OFF 12th APRIL 2011
www.firstorbit.org

an ATTIC ROOM production in association with YURI'S NIGHT & YURI GAGARIN 50
FIRST ORBIT produced & directed by CHRISTOPHER RILEY composer PHILIP SHEPPARD
title sequence editor TABITHA MOORE archive researcher & translator IYA WHITELEY
director of photography PAOLO NESPOLI film editor STEPHEN SLATER
executive producers RAVI KAPUR & RAJEEV THACKER

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As I suspect most are aware, this year is the 50th Anniversary of the first manned spaceflight, that of Yuri Gagarin aboard the spacecraft Vostok 1, 12th April 1961. There were many tributes and celebrations to this momentous voyage around the time, and many continue as this is still 'the year' of the anniversary. However possible the most intriguing tribute has been devised by an old BBC colleague of mine, Chris Riley. Having been one of the producers of the award-winning 'In the Shadow of the Moon', he came up with the idea of depicting Yuri's flight - in a real time, all 108 minutes of it. To this end he had one very important factor going for him - the fact that the International Space Station is in a permanent orbit, and it now has Cupola - literally the 'window on the world', which gives a far better view of the Earth than the far smaller viewing portholes. However one major problem was that although the ISS is in a similar orbit to that of Gagarin's flight, it isn't identical. It only repeats a similar pattern about once every six weeks, coupled with the fact that the timings have to be right for the right time of day. However this was all calculated, and eventually, after some test-shots on Expedition 25, November 2010, eventually the vast majority was shot by Italian ESA astronaut Paola Nespoli who was flying on the ISS in early 2011.

So for the June meeting, a high-resolution showing of First Orbit.

Mat Irvine

MEETING REVIEW : May 19th

Jim Webb : “Setting your Sights... a telescopic evening”

This was a more practically orientated meeting. Three telescopes were on display – the ASH 8" Celestron catadioptric reflector with altazimuth mount, my 4" Newtonian Mead reflector with polar mount and my 3" monocular telescope mounted on a photographic tripod. The evening progressed with a basic history of the evolution of the telescope from top secret military “advantage” to simple lens telescopes to modern computer controlled (sometimes almost impossible to use!) precision instruments. The advantages and disadvantages of the various types (lens or mirror) were discussed, as well as the varieties of mount. The discussion part finished early so that we could all retire to the playing field to get a glimpse of Saturn. The sky was mostly overcast so the ‘smart’ scopes could not be used as they require two stars to align properly so it was down to the 4" polar mount to get a good view of the planet with its rings gloriously visible. It was suggested that we start getting into more active observing ‘mode’ so I will be exploring reasonable local sites for observing sessions.

Jim

The Society *does* do observing in all forms - clockwise from below - the Lunar eclipse of 9th December 1992, that coincided with the ASH Christmas Party that year; Mike Roberts and his observatory; Gary Marriott during the Transit of Venus 8th June, 2004; another image from the Pole Hill viewing evening, 24th June 1984; three of your Committee in Turkey for the Solar eclipse of 29th March, 2006.

Ed



CHAIRMAN'S QUARTERS



This is going to be a bit of a deviation from my usual subject matter. It was inspired by an article I was sent, just the other day, about something which recently happened in the USA. As a preamble it needs to be said that American banks own an astronomical debt (they call it credit) and will now do anything to extract money from anyone. Many gave mortgages to people they knew would default just to seize the properties, which at the time had a high perceived value. When the true value of the seized properties was eventually ascertained (much lower than had been anticipated – hence the big credit crunch) many had to be sold off at knock down prices. And as to the management software – they have tended to adopt the Spanish paradigm of *test it on the fly!* So, armed with this background, on with the story.

A certain couple from Florida, Warren and Maureen Nyerges, thought they had got themselves a tidy little bargain when they bought a “knock down priced” home owned by Bank of America. They paid the price in full - but in typical banking style, a piece of software somewhere screwed up, and the bank sent the couple a foreclosure notice. The Nyerges fought tooth and nail in the courts, and - after an 18 month bureaucratic nightmare - the foreclosure was finally dropped... and the bank was ordered to pay \$2,534 in legal fees. Of course, in banking terms, that's pocket money, but did they cough up? Did they hell! In fact, the tight-fisted SOBs let five whole months go by without sending the Nyerges a penny. Now, some people might have taken that lying down... but not this couple. They had more guts than that. In a hugely ballsy move, they applied to legally seize the bank's assets! This is American law for you. Their attorney told the local news: "I have instructed the deputy to go in and take desks, computers, copiers, filing cabinets, anything, including cash in the drawers." And right on cue, a ton of sheriff's deputies, furniture movers and legal observers swept in on the local Bank of America branch - ready and willing to haul off anything of value that wasn't bolted down. In my mind, the scene looked like something from a classic heist movie – the bank surrounded by cops; the criminals inside sweating; the air thick with tension... except this time, it's the bankers inside who are the criminals - which seems to me like a vast improvement. Faced with that display, the bank did what most bullies do when confronted... they folded like a pack of cards and wrote the Nyerges a cheque for all the money owed **plus** expenses. Job done.

This is a delightful David and Goliath story which is both inspirational and reminds us of the real world around us. In a finite space, things cannot grow infinitely. Prices cannot keep rising indefinitely, which appears to be a fact frequently missed by business people, large organisations and bankers. Maybe we'll move to another planet when we have exhausted this planet's resources. It will take a lot of money, though – I wonder which bank will lend it?

See you at the meeting

JIM

Jim worried that this had little to do with the Society's interests, but it has the word 'astronomical' in it, so that's all right... Ed

Chemical Fun!

Jim Webb

More fun names this time. Let's start with *Moolooite*. It isn't a cow's favourite toilet (even though it is found on the ground and - let's not go there) but it is a rare blue-green mineral consisting of hydrated copper oxalate (hence the colour),



Dodoneifolius may not be extinct, but I am...

made by the interaction of bird guano with weathering copper sulphides! It got its name comes from Mooloo Downs station, Western Australia, where it first was discovered. Still, vaguely, on the southern hemisphere, there is *Dodoneine* which is not an extinct molecule. It got its name because it was isolated from *Tapinanthus dodoneifolius*, a parasitic plant that feeds on the sheanut tree found in Burkina Faso (West Africa, formerly Upper Volta, Capital City – Ouagadougou!).

If you're into cars, maybe you need *Pimpinellin* to make your ride cool! Ok, so it's actually a furocoumarin extracted from the

roots of the cow parsnip plant. It appears that if it's eaten one becomes sensitive to light, exposure to which causes skin rashes! It got its name from the plant genus *Pimpinella*, from which it was first isolated. So if your skin hurts maybe your clothes need *Flufenamic acid*! This fluffy named molecule (and, believe it or not, it is often trivially called... Fluffy) is actually an anti-inflammatory and antipyretic. Its chemical name is *2-((3-Trifluoromethyl) phenyl) aminobenzoic acid* – not such a cute name, really. It is a derivative of *fenamic acid*. A related anti-inflammatory is *arachidonic acid*. This sounds like it has something to do with spiders, but it's actually made in the human body from *linoleic acid*. Nobody has yet managed to artificially produce medical grade arachadonic acid and, currently, its only source is rats' urine - it needs a day's worth of urine from 10,000 rats to produce a single dose! Now, that really is taking the pee!

There are some chemicals you need to keep your eye on. *Cyclopamine* is definitely one of these! In the middle of the 20th century, lambs from sheep herds in Idaho began to be born with cyclopia - the presence of only one eye placed directly on the forehead. This ailment was named after the Cyclops in Homer's *Odyssey*. Apparently, in times of drought, the sheep moved to higher grounds and grazed on the flower *Veratrum californicum*. This was later found to contain three compounds which caused the sheep's cyclopia - one was named *cyclopamine*.

Some chemicals get their name in an obvious way – take *Onionin*. You might have, correctly, suspected that this sulphur-containing molecule is extracted from ... wait for it ... onions, *Allium cepa* to be precise. Some are sort of 'anti-obvious'. *Fluorene* is 'odd' in that the molecule doesn't contain the element fluorine! It actually gets its name from the fact it fluoresces under UV light. Similarly, *theobromine* doesn't contain any bromine. It is derived from cocoa trees (*Theobroma*), and is the bitter taste in dark chocolate. *Theos* actually means 'god' in Greek, and *broma* (Classical Greek) means 'food'. So, chocolate really is 'the food of the gods'!

The end is nigh – the next will be the final (and rudest) one. Beware!

OUT & ABOUT

I have to confess an interest in this special exhibition at the Science Museum as I have one item on display in it (I have other items elsewhere in the Museum, but that's another story.) I hadn't been to the Museum since *Cosmos & Culture* was on, so it was about time to catch up when I final managed a recent visit. *Mat Irvine*



Photos : left from top, models of Jodrell Bank Mk 1A and one of the four HESS dishes; a celebration of the UK Solar eclipse for 1999. Right, from top, the display

of small artefacts including the cooker from Wallace & Gromits' *Grand Day Out*, *Childhood's End*, by Arthur C. Clarke, and my contribution - one of the Martians from *Mars Attacks*; the mirror from the Rosse Telescope at Burr Castle in Ireland. Right - JET-X, the joint European X-Ray Telescope, which due to the turmoil in Russia, was never launched



The Night Sky : June - July 2011

THE PLANETS

The potential sighting of four planets in the morning skies over the previous weeks seemed a good idea, but after many nights of getting up early, checking the skies and even if they were clear, not seeing anything, your Editor gave up! However three remain for the moment - Jupiter, Mars and Venus, so there could still be opportunities

MERCURY : Now moved back into the evening skies, (superior conjunction was on 12th), but the viewing is not good. A pointer could be the twins of Gemini - Castor and Pollux - on the evening of June 30th. About an hour after Sunset you could glimpse very low down in the western skies and right to left: Castor, Pollux and Mercury - all about equidistant. The next best viewing opportunity for Mercury will have to wait until the planet's morning appearances in September. Moon close on 3rd July.

VENUS : Bright in the morning skies in Sagittarius at around magnitude -3.5, but very low down. Mars and Jupiter are both close by.

EARTH : Summer Solstice on 21st

MARS : Currently in the morning skies, with Venus and Jupiter. It is between the two, but the faintest. The best viewing will not be until September, and even then the planet will only be five arc-seconds in apparent diameter. It will be last week of 2011 before Mars will present any significant viewing opportunities, but the best opportunities will have to wait until March 2012. Moon close on 28th June

JUPITER : In the morning skies at around magnitude -2 and the highest in altitude to Mars and Venus. Moon close on 26th June.

SATURN : The only planet easily visible in the evening skies. The planet will spend most of the year in Virgo around magnitude 0.9, in the evening skies and, after conjunction, 13th October, will re-appear in the morning skies. The rings are well placed for viewing this year, even in a small telescope. Moon to the south on 10th June and 8th July.

URANUS : Was in conjunction with the Sun, 21st March. Moon close on 23rd June and 21st July.

NEPTUNE : In Capricornus, heading towards Aquarius. Moon close on 21st June and 18th July.

METEORS

Delta Aquarids peak on 29th July, although the term 'peak' is used loosely as this show can spread out weeks either side. It also favours the southern hemisphere so don't expect too much! The next major shower will be the Perseids on 12th -13th August, which is usually regarded as the best of the lot.

THE MOON



There is a total Lunar eclipse on 15th June, but you will have to catch it at Moon rise around 20.20 BST. But at this time of year of course the sky is still bright, so viewing will not be as spectacular as if the sky was darker.

There is a partial Solar eclipse on 1st July, but only for observers in the far north, so Iceland, northern Norway and Canada!

NEW 1st June
NEW 1st July

FIRST 9th
FIRST 8th

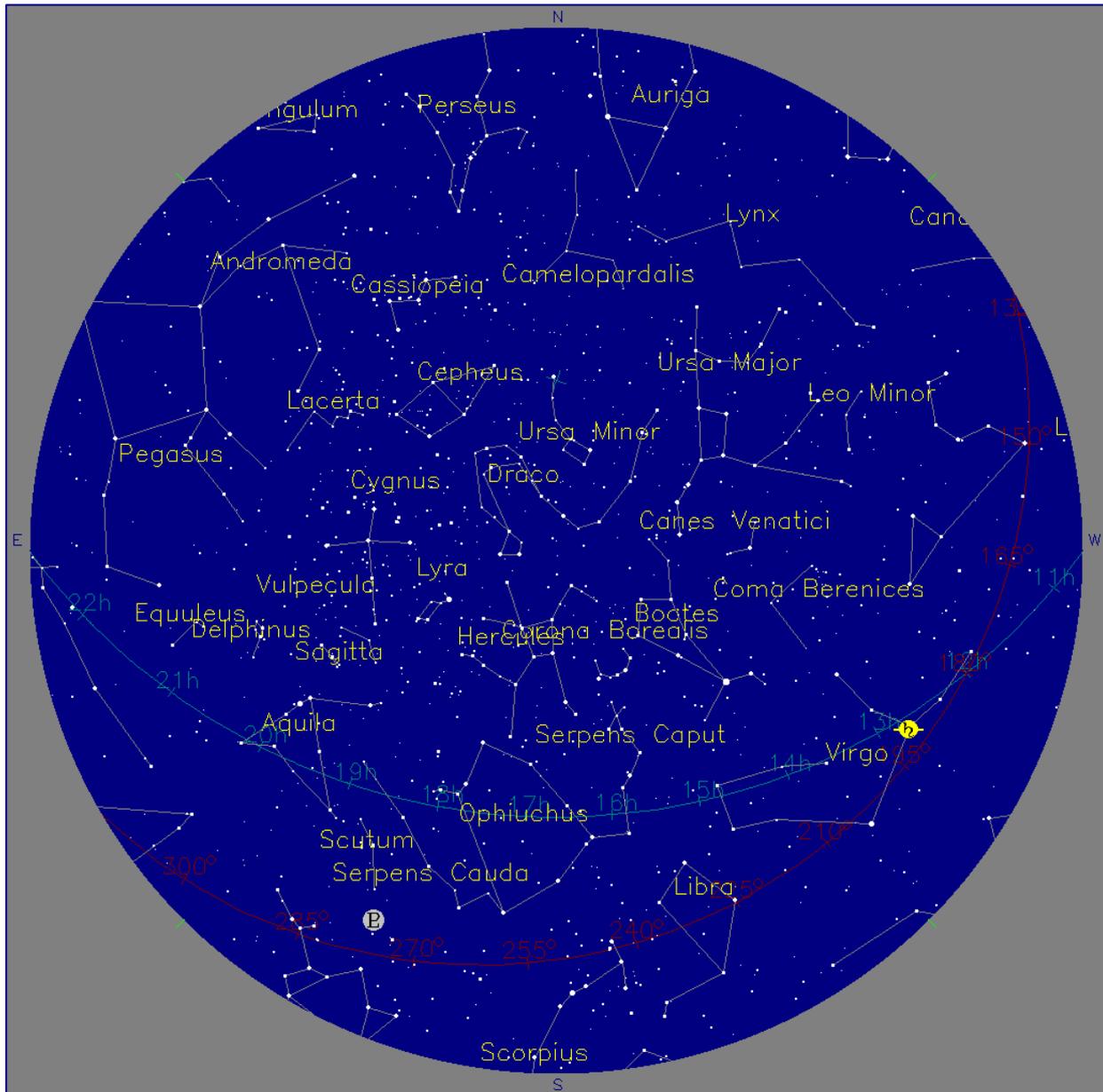
FULL 15th
FULL 15th

LAST 23rd
LAST 23rd

NEW 1st July
NEW 30th

THE NIGHT SKY : APRIL- MAY

As of 1st July 2011, 22:00:00 BST



| KEY | |
|--|--|
|  MERCURY |  SATURN |
|  VENUS |  URANUS |
|  MARS |  NEPTUNE |
|  JUPITER |  PLUTO |



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NEXT MEETING
THURSDAY 16th June 2011

THE SOCIETY'S WEB SITE : www.ashastro.org.uk

Changes and updates are (still) planned for the website - including getting the magazine, with back issues, back on line. This is planned to take place in the reasonably near future - work commitments of those involved, permitting.