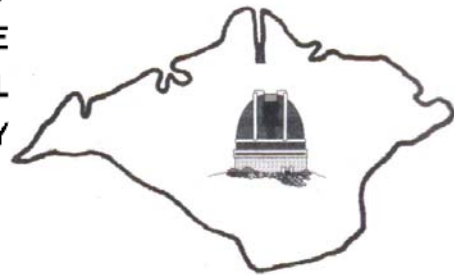


THE NEW ZENITH

THE MONTHLY
MAGAZINE OF THE
VECTIS ASTRONOMICAL
SOCIETY



VOLUME 15 No 4

7th European Symposium for the Protection of the Night Sky

MAY 2007

The seventh of a series, this symposium will be held on October 5-6, 2007, in beautiful Bled, Slovenia. (See picture below)



One important issue to be covered will be Light Pollution and Global Warming.

This year the conference will focus on the following topics:

- Protection of the night sky
- Light pollution and glare
- Light pollution and biodiversity
- Light pollution and human health
- Light pollution, glare and safety
- Night environment as a cultural heritage
- Light pollution, CO₂ emissions and global warming
- Importance of high quality lighting
- Light pollution laws
- EU Directive on light pollution

Special guests of the conference

- Representatives from EU Parliament, Committee for Environment, Public Health and Food Safety.
- Representatives from European Commission, Environment Directorate General.
- Representatives from European Environment Agency.
- High level politicians.

Deadline for paper abstracts: 1st May, 2007

Conference expedition

Friday, October 5, 2007

Astronomical observations at the darkest point in Slovenia, 1680 m above sea level, 1 hr drive from conference venue.

Post-conference expedition (option)

Sunday, October 7, 2007

A visit to Austria, about 2 hr drive from conference venue, 2200 m above sea level.

For both observations large telescopes will be available (up to 14 inch / 36 cm diameter).

Within the conference there will be exhibitions of quality lighting, light pollution photography and astrophotography.



Anyone interested in going to Bled, please contact Bob Mizon on **01202 887084**

FROM THE EDITOR

Dear Readers

All good things reach a termination, it seems. I have heard rumours that a high-level VAS Officer may be standing down at the AGM this August. This meeting, with its attendant elections for Officers and the Committee is only a few short months away. With all of the influx of new Members over the past 12 months or so, there surely must be at least one or two bristling with ideas to make VAS even more successful than it already is. All you have to do is put your name down on the vital piece of paper, stating you wish to be considered, get a Proposer to countersign it and hand it in to any Committee Member. Committee meets every 3rd Friday of the month at the Observatory and the actual work burden is far from onerous. So much so that some current Committee Members seem to have been in post for eons... But, going back to the resignation news - all will be revealed in the next New Zenith, hopefully.

Attendances at the Thursday Members and Guests evenings at the Observatory have been going from strength to strength, according to Roger Hayward (Observatory Director). If you would like to learn how to operate your Society's equipment, then pop down around 7:30 pm or later and meet like-minded enthusiasts who would be pleased to help you achieve your telescope operating licence. Likewise, if you have a telescope of your own and would like assistance with any problems in its use, bring it along if it is portable, or if not, have a talk with one of our boffins about it. All this is free to VAS Members, all part of the bargain you get when you pay your subscription.

Dark skies to all
All the best.



IN THIS ISSUE	
7th Night Sky Symposium	1
Subscriptions Due	2
From the Editor	2
March Talk	3
May Skies	4/5
Martian Enigmas	6
Galaxies & Marmalade	7
Trip into Space?	8
Sidewalk Astronomy Day	9
Website of the Month Last Words, Etc	10



NEXT MONTH'S LECTURE

WHY PLUTO HAD TO GO

Robin Gorman

(Hampshire Astronomical Society)

**May 25th
7:30pm**

**In the Parish Centre
Town Lane
Newport**

129	Mrs S. Burgess	£17
130	Mr P. Burgess	£17
225	Mr H. Rushton	£13
259	Miss H. Clark	£17
260	Miss D. Watson	£7
373	Mr W. Johnston	£17

May 2007 Subscriptions

Will the following members please note that their subscriptions are now due. Cheques should be made payable to the Vectis Astronomical Society, and sent to the Membership Secretary: Antony J. Plucknett, Mistydale, 12 Greenways, Newport, Isle of Wight PO30 2BG.

IMPORTANT NOTICE

Owing to the poor response to members' subscriptions being posted in the New Zenith in the past, this practice will cease after this issue. Instead, every member will receive a written reminder through the Post at the beginning of the month that their subs are due. I would ask members to ensure that they forward their remittance as soon as they possibly can. Will everybody please note, no second reminder will be sent.

Thanking you in advance for your co-operation in this matter, Tony Plucknett. Membership Secretary.

This month's 'remindees' appear on the far left of this column.



An Introduction to the Night Sky

Peter Burgess, VAS

Looking at the night sky there appears to be a uniform distribution of stars. Before the telescope was invented astronomers assumed that the Universe had always existed and was uniform and infinite. A logical extension to this line of reasoning leads to the conclusion that wherever you look in the sky eventually your line of sight will intersect with a star. Therefore the night sky should be as bright as day! This is Olber's paradox and was only resolved when astronomers realised that stars are not uniformly distributed and that the universe is bounded and expanding. Also it is of finite age having come into existence about 13.7 billion years ago in the Big Bang.

Our own star – the Sun – provides all our heat and light and is a highly active body. If the image of the Sun is projected onto a white card – the only safe way to view the Sun – then dark spots will often be seen on the surface. These spots are only dark in comparison with the rest of the surface. Associated with the spots are solar flares that can often be seen with solar telescopes, erupting from the limb of the Sun. The energy released in solar flares can cause aurorae and interrupt radio communications on Earth.

The Earth orbits the Sun along with the other planets of the Solar System. Johannes Kepler realised that the apparent motion of the Sun against the background stars could only be explained if the orbit is an ellipse with the Sun at one focus. The plane of Earth's orbit is called the plane of the ecliptic but the rotation axis of the Earth is tilted with respect to this plane. As a result, during the northern hemisphere's winter the North Pole points away from the Sun whereas during the summer the North Pole points towards the Sun. This causes the seasonal variations in our weather.

Another phenomenon that Kepler discovered is that the imaginary line between the Sun and the Earth sweeps out equal areas in equal times. This means that the Earth moves faster in its orbit when it is closer to the Sun. We measure time in equal 24 hour days so the difference in orbital speed is apparent in the position of the Sun in the sky. If the position of the Sun is plotted at the same time each day over a year then in the winter the Sun will be low in the sky and in the summer high in the sky. In addition, the varying speed of the Earth in its orbit results in the Sun sometimes being ahead of the 24 hour clock and sometimes lagging behind. As a result the plot of the Sun's position over the year will be like a skewed figure of eight. This figure is known as the analemma.

The planets of the solar system can be divided into inferior and superior objects – orbiting closer to the Sun than the Earth or further away. All the planets orbit close to the plane of the ecliptic so that the Solar System is like a disc with the Sun at the centre. Superior planets can be anywhere in the sky along the ecliptic but inferior planets remain close to the Sun reaching a maximum elongation when the Earth, Sun

and planet form a right angle.

Earth is unusual among the planets in that it has a Moon that is of comparable size to itself. Some astronomers think of the Earth-Moon as a double planet. As the Moon orbits the Earth its position relative to the Sun as seen from the Earth causes the phases of the Moon. When between the Sun and Earth the illuminated side of the Moon is hidden and the Moon is 'new'. As it moves so that the Sun, Earth and Moon form a right angle, half the sunlit face becomes visible at first quarter, then with the Earth between Moon and Sun full Moon is seen. The reverse condition then occurs as the Moon wanes to third quarter and the next new Moon.

Coincidentally the Sun and Moon are nearly the same apparent size so that, if the alignment is exact the new Moon will completely cover the Sun causing a total eclipse of the Sun. This phenomenon will only be seen from a position directly under the path of the Moon. More generally visible is an eclipse of the Moon when the full Moon passes into the Earth's shadow. The eclipsed Moon will still be visible with a red tinge due to light from the Sun refracted through the Earth's atmosphere.

The Earth rotates on its axis once every day or 15° every hour. This rotation is apparent in the motion of the stars at night. Individual stars rise in the east, reach a maximum elevation at their zenith and then descend to set in the west. To help identify stars the night sky is divided into constellations. By definition of the International Astronomical Union there are 88 constellations which include ancient groups that date back to early civilisations and more modern ones that represent scientific instruments introduced to fill spaces in the sky.

Describing a particular star as belonging to a specific constellation is not enough to allow an astronomer to point a telescope at that star. A number of coordinate systems are used to precisely pin point a star's position. Altitude and azimuth describes the height of the star above the horizon and the distance from the meridian (overhead to the observer). However these values change as the Earth rotates. Hence Right Ascension (RA) and declination (dec) are used which are angles measured from a universally agreed point in the sky. Declination is the angle measured north or south from the celestial equator while the RA is measured from where the celestial equator intersects the ecliptic. This point is known as the first point of Aries since when it was first defined it was in the constellation of Aries.

A common question for a newcomer to astronomy is what telescope to buy. At first the answer may be not to buy one at all. The naked eye with its wide field of view is the best way to learn the general position of the brightest stars that will then help the observer to find dimmer objects. A pair of binoculars can often be better than a telescope being more manageable and easier to hold steady. Typically 7x50 or 10x50 binoculars, where the first figure is the magnification and 50 is the diameter of the objective lens in millimetres, will provide a good introduction to the sky.

Reported by Roger Young



May Skies

John W Smith

The Planets

Mercury. There is very favourable apparition of this planet, seen at its best between the 16th and the 26th of the month when it will appear in the north west horizon at an elevation of some five degrees.

Venus still presents a good image bright image but starts its descent towards the horizon as it moves nearer the Sun, but will continue to be visible for a couple of months. It will be interesting to follow its phase changes as it sinks lower in the sky.

Mars shows a gibbous phase and a little of the night side may be visible. On the 13th the planet is 2 degrees south of the waning crescent Moon.

Jupiter is approaching opposition and presents a 45sec of arc image and is quite bright in the southern area of the night sky.

Saturn becomes occulted by the first quarter of the Moon on the 22nd of the month and is visible from anywhere in the British Isles. The occultation starts when the Sun is still up and the planet re-appears from the Moon's bright limb at around 21:13 (sunset time).

Uranus and **Neptune** are not favourably placed for viewing.

Meteor Showers

There are two active showers this month.

1 The *Aquarids* give an unfavourable peak on the 5th. This stream is associated with Comet Halley and rates of up to 35 per hour may be observed.

2 The alpha *Scorpiids* give their second maximum on the 13th and although the rates are only expected to be around 5 per hour the conditions are fairly favourable as the Moon does not intrude.

Moon Phases

New	1st Quarter	Full	Last Quarter
16 th	23 rd	2 nd	10 th

Deep Sky Objects for small telescopes and binoculars

With one notable exception there is a dearth of suitable deep sky objects directly listed under May so I am including one that would normally be viewed in the June period and this will of course be seen later in the night during May.

M5 NGC5904. This fine globular cluster in Serpens lies about 25,000 light years away, is about 2.2 billion years old and is one of the oldest known clusters. It is an excellent object for almost any instrument.

M102 NGC5866. This edge-on spiral in Draco is one of the "missing" Messier objects and it was added to the Messier album after Messier had completed his listing! There is some doubt about this object and it is quite a faint nebula. It is worth having a look and seeing if you can find it. It has been quoted as a faint edge-on galaxy in one of my reference books.

M13 NGC6205. This globular cluster in Hercules is known as the "Great Cluster in Hercules" and is an excellent object for any instrument. Use all the power you have to resolve some of the stars of which there are an estimated number of around half a million. A small telescope shows it as a fuzzy ball but a larger instrument can resolve stars in the nucleus. This cluster lies about 20,000 light years away.

Coordinates

M102 No certain co-ordinates given but is between omicron Bootis and iota Draconis. Also see the sky map for general area. Best of luck!

OBJECT	RA	DEC	MAG	SIZE
M5	15h 18m	+02deg 11m	6	12.7
M13	16h 41m	+36deg 30m	6	10.0

50th ANNIVERSARY OF SPUTNIK ONE

Way back in 1957, a new phenomenon burst upon an unbelieving world. High above Earth circled a small metal sphere that emitted radio bleeps as it sped along its path. The USSR had stolen the United States' thunder by a successful launch of the world's first artificial satellite. VAS will celebrate the event at the Observatory later this year. If you have any memories of that time or memorabilia itself, please contact Lucy Rogers

SAGAS VISIT SOON

Although not until July 14th (Bastille Day for Francophiles!), nevertheless plans are being made for VAS being the hosts this year for the Summer Rally of the Southern Area Group of Astronomical Societies (SAGAS). Richard Flux will be providing further details nearer the date. In the meantime anyone willing to help out at the

Newchurch Pavilion next to the Observatory please contact him. We will need providers of transport between Sandown Rail Station and the venue for example, plus comely wenches to serve the lunches. An added incentive to be there is that Dr John Mason is pencilled in to give us one of his splendid oratories. Say no more, squire...

THE MARTIAN ENIGMAS (Part 1)

Alan Matthews

In the thirty years since NASA's **Viking Orbiter** captured the image of the "Face on Mars," this Martian feature has become a fixture of space-age iconography despite repeated efforts by orthodoxy to remove it from our collective psyche -- depicting it as a laughable space oddity to be ignored rather than an authentic scientific mystery. NASA's **Mars Odyssey** craft has recently returned impressive new images of the face feature: in April 2005, and again in July 2005. The short of it: for a "trick of light," the "Face on Mars" continues to look pretty much face-like. The images, taken with the THEMIS camera in visible-light, lob a challenge into the laps of Face detractors who maintain it is merely a un-face-like mesa. These new snapshots of the Cydonia Mensae region -- showing not only the Face but several other interesting Cydonian landforms first imaged by the 1976 Viking spacecraft -- presents a view of a scattering of amorphic mesas and knobs in the Face's vicinity, none of which approximate the Face's defining symmetry and anthropomorphism and cleanly defined framing unnatural-like mesa. The THEMIS image effectively "removes" superficial damage, underscoring the formation's anomalous humanoid appearance. The conclusion is quite plain: the formation is emphatically still a face, whatever its origin.

But the bottom line is that the latest scientific findings render previous criticisms concerning artificiality of the Face moot. Ascribing this feature of such uniqueness to "wind erosion" is to plead a special case for a geologic process with no supporting evidence. The hypothesis that the Face is a highly symmetrical artificial object that appears as it does today due to the effects of erosion and deposition over an enormously long period of time is simpler and more plausible than the hypothesis that it is a natural landform. But with the multitude of other observed (and measured) anomalous objects in this one same small region, the "Face on Mars" is but a single element in a much more elaborate and potentially significant scientific problem, and is thus more properly viewed as a component in a much more challenging evidential arena rather than as an isolated anomaly (a key component of the Face-debunking campaign is ignoring the other oddities in the Cydonia region. At most you'll hear a vague reference to "other objects" but care is taken about not telling us what they are). Providing evidence, incompatible with blind natural forces (to say nothing of their incriminating proximity to the Face), the surface anomalies lend themselves more easily to an architectural interpretation -- the abundant survival of detected geometry in the ruins being very consistent with this explanation. Taken individually, any one of the features would be anomalous and worthy

of close scrutiny. In unison, they provide a potent argument in favour of intelligent engineering. Random acts of erosion simply cannot produce such angularities, perpendicularities and proportion, along with the diversity of forms, pattern of organisation, and subtleties in design, in such an elegant and redundant manner.

When the "smoking gun" can't be found -- no conclusive proof, no eyewitness to the crime -- judgement in a court of law must be made on circumstantial evidence: e.g., the testimony of several witnesses, fingerprints, blood samples, and other clues that might be found at the crime scene. The convergence of many lines of evidence point inevitably toward only one plausible conclusion. Science operates in a similar way. No single piece of the body of evidence that has been developed is sufficient in itself to prove the anomalies in this region of the Martian surface to be artificial or natural. On the other hand, the quantity, and quality of evidence, which is of the type that could be used in practice to detect a new archaeological site on Earth using aerial or satellite imagery, all point to just one inescapable conclusion: the technological remains of an unknown, long-vanished intelligent extraterrestrial occupation of Mars. Inquisitive readers can find out more about the Face, and other Cydonia anomalies by first visiting the Society for Planetary SETI Research (SPSR) website. SPSR are a multidisciplinary team of fastidious and honest academics and professionals -- with impeccable credentials that are beyond reproach, who, because of the import of the situation, and minds opened by wonder, are willing to confront conformity and battle to have paradigm-shifting evidence considered for its scientific merit. SPSR's involvement was central in getting NASA/JPL to acquire and release additional images of the Cydonia region, and they've done an admirable job of applying unbiased scientific method to what seems, at first, the stuff of New Age wet dreams.

So, with all its significant implications for humanity, what could possibly be a bigger (or more "transformational") story than evidence that could lead to the confirmation that our neighbouring planet, Mars, has a giant, mile-wide sculpture of a human face lying on its reddish sands...staring upward into space? Ironically, along with failing to pass muster with those who will continue to chalk the formation up to "seeing faces" regardless of the well-substantiated quantitative data favouring artificiality, the so-called "fame" of the "Face on Mars" -- when rarely mentioned - can probably be more correctly attributed to the incessant (indeed, as though it is perceived as threatening on some unspoken level, somewhat frantic) attempts to debunk it into nothingness.

(Continued on page 9)

Galaxies and Marmalade

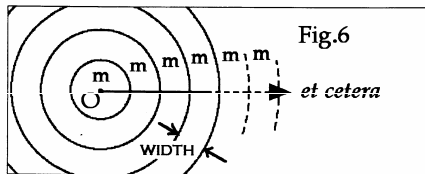
(continued from last month)

Last month Dr Guy Moore gave us an interesting insight into formation of spiral galaxies (and information about making marmalade, too). He follows this month with practical instructions on how the reader may emulate his experiments using BBC Basic on your PC.

Computer recipe for a 'flat rotation curve' galaxy, dark matter free!

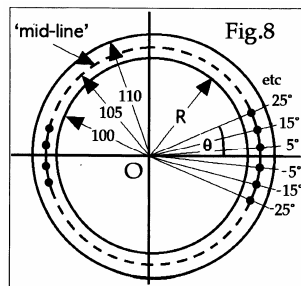
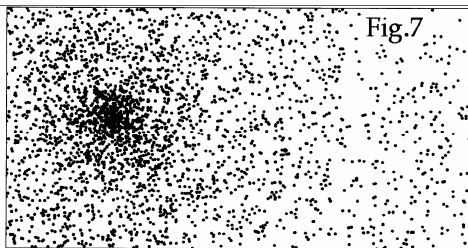
Ingredient: Newton's law of gravitation (G=1 here).

1. A galaxy of rings. Imagine, in Fig.6, viewed in plan, a series of concentric flat rings, centre O. Each ring has equal mass m and constant width. Since circumference is $2\pi R$ (R = radius), then the mass of each ring is spread around a bigger area, the bigger the ring. This means the area density varies inversely with the radius. This simple and very special annulus has remarkable properties, including a 'flat velocity rotation curve'.



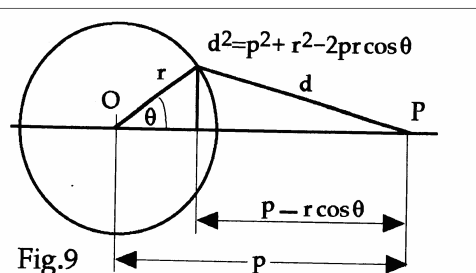
plan.

2. Geometry. The 10th ring, Fig.8, has inner radius 100, outer radius 110, and 'mid-line' radius ('mlr') 105.



Unit masses are placed on the 'mid-line' every 10., starting at 5., (avoiding 0° and 180°). Total mass of this ring (and every ring) is 36 units. See more geometry in Fig.9.

3. Go for "Eureka!" Find a BBC Micro, or visit www.rtrussell.co.uk - here the user-friendly, free, BBC Basic demo program with 8k of memory is fine. Copy and



Run this small practice program (it draws a line in graphics):

```
10 MODE 0
20 DRAW
500,500 30
END (Mode
```

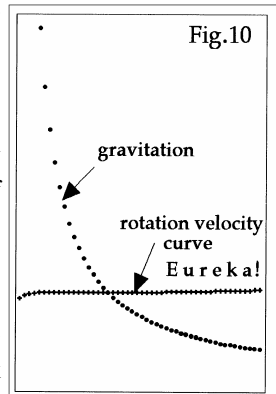
To edit, go to 'Run' and drag down to 'Stop'. Try the simple program above, or go for Eureka! In this program, below, for each position of p , the gravitation is calculated by summing the force component p to 0, for all the masses in every ring as far as the outer chosen annulus radius of 1000.

```
10 MODE 0: REM Eureka! for New Zenith
20 FOR p = 0 TO 500 STEP 10 : g = 0
30 FOR R = 0 TO 1000 STEP 10: mlr = R+5
40 FOR theta = 5 TO 175 STEP 10 : ang =RAD(theta)
50 cth = COS(ang)
60 ds=(p*p)+(mlr*mlr)-(2*p*mlr*cth):d = SQR(ds)
70 F = (p - mlr*cth)/(ds*d):g = g + F*2
80 NEXT theta
90 NEXT R
100 velrot = SQR(g*p)
110 PLOT 69,p,g*1000:PLOT 69,p,velrot*50
120 NEXT p
130 END
```

A plot like Fig.10 indicates success!

4. Experiment! e.g. reduce the annulus outer radius to 500, line 30, and watch the rotation velocity rise - caused by the removal of outward acting gravity from the annulus external to P .

I will be happy to tell you more about these models, like how to add a spherical core and a black hole. Meanwhile, the following program draws a very glancing view of a 'flat rotation curve' annular galaxy, white stars on black. Alter the numbers (sensibly) according to taste! (e.g. change 0.05 to 0.1,0.2... or 1)



10 MODE 0 : stars = 0 : REM pretty picture!

```
20 REPEAT: stars = stars + 1
30 th = RAD(RND(36000)/100)
40 R = RND(10000)
50 X = R*COS (th) : Y = R*SIN (th)
60 PLOT 69, 500 + X, 500 + 0.05*Y
70 UNTIL stars = 100000
80 END
```

Chaos programs need more memory - the bigger BBC emulator available is very educational and must be good value for money. What simple programs on this page! - so why didn't I solve the annular gravity problem in 1993? - things can look far too simple with hindsight.

Thanks are expressed to the very helpful IoW librarians. (*Editor's note* - those having eZeniths can save time by merely highlighting the bold text, copy then paste it into the BBC Basic, then select 'run'. Easy, and no errors!)

Win A Trip into Space

Back in the March NZ we drew readers' notice to the New Scientist/Audi A6 competition to win a flight to the edge of space. It was requested in these columns to join in the fun by submitting thoughts as to the 'best patented invention of all time' which was the entry requirement of the competition proper.

Graham Osborne emailed:

"In my view, it's found in the smallest room in the house - yes, the W.C.; but was a patent ever taken out? I don't know!!!! Why? - public health! But how does one find out if an invention is patented? I have heard that many so called 'popular' inventions never had a patent taken out, and many totally unused ones were patented both sides of the Atlantic. Other brilliant ideas were the steam engine (although I now understand James Watt wasn't the first person to construct one); and the church person - sorry, I don't know his status - who threw himself off a church tower in 15 something or other holding onto what was the first glider and proved that man could fly! He was later killed in a subsequent attempt."

Of an equally domestic nature, our distant member out in Shropshire, Barbara Allen, wrote to say:

"My choice of the 'best patented invention of all time' is the humble domestic iron! While ironing clothes and other items, you kill any germs or bacteria left behind after washing. It can also be used to iron out Christmas wrapping paper to be used again, ie recycling; toast bread when no toaster is available; straighten women's hair for the latest fashion in styling; and, when cold, can be an excellent paperweight, also as a door stop.

If my choice sounds frivolous, it is because, in my opinion, all other beneficial inventions are too numerous to make a serious choice!"

Barbara concluded with: "Thank you for the excellent monthly magazine New Zenith. I look forward to it dropping through my letter box."

Thanks, Barbara, for those kind comments. You certainly know how to get your thoughts printed...

Nobody mentioned 'the Wheel' but was it ever subject to a patent?
Editor



TALKING OF TRIPS INTO SPACE, CAN ANYONE GUESS WHAT IS GOING ON IN THIS PICTURE? IT ALL SEEMS PRETTY SERIOUS. REPLIES TO THE EDITOR PLEASE BY 6TH MAY.

(Continued from page 6)

Or, at best, lukewarm assurances that anomalies such as the Face are simply geological oddities that prey on our inclination to seek meaning in the unfamiliar. It's all a wonderfully efficient system. It works, effectively censoring any open dialogue – and, if you fall for it, your reward is a certain smugness and a vicarious sense of intellectual infallibility. Of course, it's all based on a tissue of misconceptions and falsehoods -- but who has time for details? But fashionable debunking aside, given the well-researched documentation, and informed commentary available from individual SPSR researchers*, dutiful perpetuating the deceitful “trick of the light,” “just a normal rock” stance has grown decrepit, toothless, and flatly inexcusable. Maybe the time has come for independent thinkers, armed with real knowledge as opposed to false preconceptions, to begin questioning this agenda. At the very least, this should serve to arouse deep scepticism of the dogmatic approach to extraterrestrial communication -- with the persistent idea being that searching for deep-space alien radio signals is somehow more “scientific,” and thus more “respectable,” than looking for evidence closer to home.

The situation is further exacerbated by the institutional bias that is evident within NASA/JPL. Its ideological stranglehold on the Mars exploration timetable is entirely geology-driven, fronted by career geologists. So the space agency chooses to ignore that there is a controversy, or at least a controversy in the scientific sense in the Cydonia region of Mars and frowns on the whole endeavour -- per-

sonnel having provably resorted to an intensely political disinformation campaign to suppress Press interest in new images, by deliberately downgrading properly processed photos, making spurious comparisons to terrestrial landforms and creating fallacious images, using erroneous Laser Altimeter-generated data. So yes, there is a cover-up of sorts, but it's in plain view for anyone who cares to look into the matter objectively. It can be speculated endlessly on the forms a more nefarious cover-up might take. Any thoughts to New Zenith or, conversely, I can be e-mailed at alan.matthews3@jobcentreplus.gsi.gov.uk

To be continued...

Relevant contacts:

THEMIS visible-light image-strips containing the Face:
<http://themis-data.asu.edu/img/V10598012.html>
 (April 2005)
<http://themis-data.asu.edu/img/V12445004> (July 2005)
 Society for Planetary SETI Research:
<http://spsr.utsi.edu/>

.....
 *SPSR states:

“...we all agree that anomalous features we have seen in images from Mars convince us that: the issue of artificial structures on Mars should be openly debated in the scientific community, that mainstream journals should be open to review of qualified technical papers on this subject matter and, that follow-up images to test the predictions of the hypotheses of natural versus artificial origin for these anomalous features should be a priority for the remaining lifetime of the MGS spacecraft and its successors.”

1st INTERNATIONAL SIDEWALK ASTRONOMY NIGHT, MAY 19, 2007

We'd like to invite all amateur astronomers to take their telescopes out to the sidewalk on the evening of May 19th. We know that many amateurs have commitments with local observatories, planetariums, libraries, etc on the Saturday evening near first quarter Moon, but if you can spare some of your members, it would be great if they could find places where people AREN'T expecting to look through a scope. Most outreach is focused around people who already know they want to see the night sky, that's why they are at an observatory or planetarium, but we need to expose people who don't even know yet that they are interested in astronomy. It is so important that “amateurs take telescopes to the people” (John Dobson). The truth is most people aren't at the observatory, most people are out having dinner, going to the movies, shopping, etc.

Sidewalk Astronomy does not have to be a large, highly coordinated event. It's very simple – grab a scope and go stand on the corner, in front of the movie theater, next to a convenience store, near a subway or busy bus stop, by a book store – anywhere there are large numbers of people walking by. One or two scopes at any given location is more than enough. You all know that you don't need a huge scope to look at the Moon, so take your smaller scopes out. Many times, individuals and clubs contact us asking about how to do sidewalk astronomy. They usually are trying to get several people out, they want to promote it with local media, they worry about permits, they want to know what information they should give people – all kinds of questions. It doesn't have to be that difficult. Find somewhere near where you

live, grab a scope and go.

We will post on our website who is going out on the night of May 19th. We don't need to have an exact location yet, but you do need to send contact information that you don't mind being posted on the internet. Later, when you have exact locations, we will post them, along with minimum times you expect to be out. If you have the exact location already, that is fine too.

On the evening of May 19th, we encourage you to take a few photos when it doesn't disrupt observing and to try to keep some kind of count of the number of people that look through your scopes. If you have more than one scope at a location, please only count the people once. We'd like to get an idea of how many people we reach.

Afterwards, for those who send us photos and/or summaries of their activity that night, we will be sending them a founders button of some kind (I could use someone to design that....) and we will possibly be putting together a commemorative booklet of the event for John.

I will have flyers posted on the website that can be copied to be handed out that night in the next couple of weeks. You can also use your own flyers, we just ask that you also have our website listed.

(For more information about the Sidewalk Astronomers and John Dobson, see WEBSITE OF THE MONTH on Page 10.

Thanks are due to Lucy Rogers for bringing my attention to this event. Ed)

INTERESTING FACTS PART 30

Your Editor and Bill Johnston were discussing the recently discovered phenomenon above the north pole of Saturn. A 6-sided pattern has been twirling around. Almost 15,000 miles across, it could accommodate two Earths within its shape with ease.

What could cause such an odd shape with almost straight sides? Thinking back to childhood times, we remembered how soap bubbles cluster together. Their interstices form almost straight lines. Substitute bubble of magnetic flux for the soap film and the result could be a rotating six-sided flux cage that would trap particles from the solar wind.

It's one theory anyway - does anybody have a better one? Remember, you read it here first.

We at Island Pulse watched the lunar eclipse and took some photos to go with our small article; we provided a link to VAS as a matter of our readership interest. <http://www.islandpulse.co.uk/b2/isle-of-wight-views-lunar-eclipse/>

If anyone in the VAS would like to provide images of the event please feel free to send them to us and we will add giving copyright to owner. If you would like any of your forthcoming events advertised, then please feel free to forward them.

Kind Regards, Amanda
www.islandpulse.co.uk
editor@islandpulse.co.uk

Website of the Month

www.sidewalkastronomers.us

Drop in to this site and learn exactly what made John Dobson go out on the streets and preach astronomy to the masses. If you have not yet visited the VAS Observatory, please come on down and see the 18inch Dobsonian telescope that John Dobson himself autographed when he visited us a few years ago.

John also has his own theories concerning the Big Bang that fly in the face of convention. A unique man indeed...

PHOTO QUALITY IN THIS ISSUE
All pictures are good quality

LAST WORDS

An astronomer died and went up to heaven. He was greeted by St Peter who told him that as he loved the night skies he would find all he wanted in his new existence. Only one rule to remember, do not step on any stars since they were sacred. If he did, then the punishment would be to have the most ugly and despicable resident of heaven chained to him for all eternity. So off he went happily to explore his new abode.

The next morning he awoke from a wonderfully refreshing sleep only to find a gorgeous young lady chained to him in bed. He couldn't believe his good fortune but then he saw that she had been crying bitterly. He asked her what her problem was and was informed that she had been stupid enough, that previous night, to have stepped on a star...

Submissions to the **NEW ZENITH** are very welcome and should be sent to the the following address
The Editor **NEW ZENITH**
'Keepers Lock', Youngwoods Way
Alverstone Garden Village
Sandown PO36 0HF
Tele: 01983 407098
E Mail: johnvl@tiscali.co.uk (any attached files in Word Document format, preferably)

FIND VAS ON THE INTERNET

Members should note the Vectis Astronomical Society Website address:

<http://www.vectis-astro.org.uk>

MATERIAL FOR THE NEXT ISSUE TO BE RECEIVED BY THE 6TH OF THE MONTH

The Vectis Astronomical Society and the Editor of the New Zenith accept no responsibility for advice, information or opinion expressed by contributors