

# VollieNews

NOVEMBER 2003

Newsletter of the POVG-The Perth Observatory Volunteers' Group Inc.

## STAR VIEWING NIGHT RECORD SET IN SEPTEMBER

The Mars viewing sessions have worked really well and gone a long way to meet public demand. The extra sessions scheduled resulted in the Observing a new

record with monthly attendance of 1,208. Also, the cumulative attendance at 1,584 (includes visitors from July and August) is by far the highest it been at the

end of September. Well done everybody. Regards, Jamie.

## A NEW MOON FOR NEPTUNE

The outer solar system just got a little more crowded, as astronomers have discovered another small moon circling Neptune. The new find, designated S/2003 N1, travels in a distant and highly irregular orbit that averages nearly 50 million miles from the planet and takes 26.3 years to complete one revolution. Observers David C. Jewitt, Jan Kleyna, and Scott S. Sheppard identified the tiny object, about 40 kilometres across, as a 26th-magnitude blip in images acquired on August 29th with the giant Subaru telescope atop Mauna Kea, Hawaii. Based on orbital calculations by Brian G. Marsden (Minor Planet

Center), its motion was matched to that of an object first seen in August 2001 and two times thereafter. S/2003 N1 is Neptune's 12th satellite. In 1999, while inspecting 13-year-old images taken of Uranus by Voyager 2, planetary specialist Erich Karkoschka (University of Arizona) spotted a tiny moonlet circling about 50,000 kilometres above the blue-hued planet. But because it was so faint and small, no more than 40 km across, his find could not be confirmed by telescopes back on Earth. Consequently, two years ago the International Astronomical Union decided to

remove S/1986 U10 from its official list of Uranian satellites. But thanks to observations made August 25th using the Hubble Space Telescope's new Advanced Camera for Surveys, Karkoschka's claim has been verified. Mark R. Showalter (Stanford University) and Jack J. Lissauer (NASA/Ames Research Center) found the 24th-magnitude object about 48 degrees ahead of its predicted position. S/1986 U10 circles Uranus every 15.3 hours and is the planet's 22nd known moon.

Peter Birch Astronomy is Looking up !!

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- ◆ VOLLIE TRAINING NIGHTS - DATES AND TIMES

## POVG MEETING - MINUTES

Perth Observatory Volunteer  
Group Inc.  
Minutes of Meeting 22nd  
September 2003

### Present.

R.Loney. T.Smith. D.Hartley.  
J.Morris. T.Beardsmore. D.Emrich  
T.Beston. R.Boelen. J.Alcroft.  
G.Lowe. M.Haslam. J.Milner.  
G.Colletti M.Freeman.  
L.Robinson.

### Apologies.

F.Bilki. L.Bell. B.Hollebon.  
D.Alderson. R.Taylor. E.Walker.  
T.Dunn. E.Cowlishaw. K.Kotze.

In the absence of T.Dunn and  
K.Kotze the meeting was Chaired  
by J.Morris at 7.17pm

Minutes of the previous meeting  
were signed as a true and correct  
record on the Motion of T.Beston  
Seconded by J.Alcroft

### Treasurer's Report.

B.Harris stated that the financial  
situation was unchanged since the  
August Meeting.

Matters Arising from the minutes.  
None.

### General Business.

J.Biggs stated that there had been a  
number of occasions when volun-  
teers had failed to arrive at the  
Observatory on nights that they  
had nominated to attend, and that  
people were not nominating for  
Standby nights. This combination  
had caused problems, particularly  
when Tours were fully booked.  
Please ensure that if circumstances  
are such that you are unable to  
attend, that you ring the  
Observatory in time for someone  
else to be contacted.

J.Biggs informed the meeting that  
Tom Smith had tendered his resig-

nation and would be finishing  
his duties at the Observatory on  
25th September. J.Morris on behalf  
of all the Volunteers expressed  
his regret that Tom was leaving,  
and thanked him for his willingness  
to teach new volunteers and for his  
company over the years since the  
Volunteers started.

G.Lowe stated that Brett Turner  
would be giving a talk on Mars at  
the next meeting.

B.Harris reported that K.Kotze and  
Dr A.Williams would be absent  
from the next meeting due to  
involvement with the Solar  
Powered Car race starting from  
Darwin.

There being no further General  
Business the meeting closed at  
7.32pm

## 2003/2004 TRAINING NIGHTS SCHEDULE

Training is important for our  
volunteers, they enjoy it and we  
need to support these staff mem-  
bers in return for the assistance  
they render.

Generally, these training nights  
are scheduled for 7pm the Monday  
after the week of Last Quarter.

This list is also displayed on the  
volunteer noticeboard.

Your cooperation is appreciated.  
Jamie Biggs. Govt Astronomer

2003	2004
May 26	Jan 19
Jun 30	Feb 23
Jul 28	Mar 15
Aug 25	Apr 19
Sep 22	May 17
Oct 20	Jun 14
Nov 24	Jul 12
	Aug 9

## SKY EVENTS FOR NOVEMBER

All Month - Time travel 2.2 mil-  
lion years into the past by finding  
the Andromeda Galaxy (evening).  
The Andromeda Galaxy is the fur-  
thest object that can be easily seen  
with the unaided eye from a dark  
sky location in the Southern  
Hemisphere.

2nd - 4th - Moon passes Mars  
(evening sky).

9th - Full Moon. Avoid nights  
around this date for star parties.

13th - 16th - Moon passes Saturn,  
and the stars Castor and Pollux  
(the brightest stars in the constella-  
tion Gemini The Twins) (morning  
sky).

17th - 19th - The Moon passes  
Regulus (the brightest star in Leo  
The Lion) (morning sky).

18th - 20th - Moon passes Jupiter  
(morning sky).

24th - Partial Solar Eclipse on the morning of November visible from  
all Australian capital cities.

<http://www.ozskywatch.com/amsz/space/skyevent/2003/summary.html>

## PHASES OF THE MOON FOR 2003 (WA TIME)

New Moon	First Quarter	Full Moon	Last Quarter
Jan 3 04:23	Jan 10 21:15	Jan 18 18:47	Jan 25 16:33
Feb 11 08:48	Feb 9 19:11	Feb 17 07:51	Feb 24 00:46
Mar 31 00:35	Mar 11 15:15	Mar 18 18:34	Mar 25 09:51
Apr 2 03:18	Apr 10 07:40	Apr 17 03:35	Apr 23 20:18
May 01 20:15	May 09 19:53	May 16 11:36	May 23 08:30
May 31 12:20	Jun 08 04:27	Jun 14 19:16	Jun 21 22:45
Jun 30 02:38	Jul 07 10:32	Jul 14 03:21	Jul 21 15:01
Jul 29 14:53	Aug 05 15:27	Aug 12 12:48	Aug 20 08:48
Aug 28 01:26	Sep 03 20:34	Sep 11 00:36	Sep 19 03:03
Sep 26 11:09	<b>Oct 03 03:09</b>	<b>Oct 10 15:27</b>	<b>Oct 18 20:31</b>
<b>Oct 25 20:50</b>	Nov 01 12:25	Nov 09 09:13	Nov 17 12:15
Nov 24 06:59	Dec 01 01:16	Dec 09 04:37	Dec 17 01:42
Dec 23 17:43	Dec 30 18:03		

<http://www.wa.gov.au/perthobs/tpc5mm03.htm>

## NOVEMBER 2003 METEOR SHOWERS

November has two major meteor showers, the Taurids and the Leonids.

The Taurids peak November 4th-7th, but some may be seen anytime from October 20th through the end of November. The Taurids have a peak rate of 12 meteors per hour, or about one every five minutes on average.

The Leonids, is probably the most famous meteor shower of all. In 2003 the Leonids will have returned to a more normal shower rather than the storms we've seen in the last few years. This shower is the result of the Earth's passage through the dust and debris left by the comet 55P/Tempel-Tuttle.

Comet 55P/Tempel-Tuttle returns to the inner solar system every 33 years. Each time it passes through our part of the solar system, it leaves a trail of dust along its path. These small grains of dust are what become such bright and beautiful meteors in our skies.

Unfortunately the bright Moon will obscure the fainter meteors for us in 2003, but it's still worth giving the Leonids a chance.

Comet 55P/Tempel-Tuttle: History and details about the 1998 Apparition Comet Tempel-Tuttle was "discovered" independently by William Tempel in December 1865 and by Horace Tuttle in January 1866. After this apparition,

calculations showed that the comet was in an elliptic orbit with a 33-year period. This information was then used to prove that Tempel-Tuttle was the same comet that had been observed in the year 1366 and again in 1699. The orbit determination was also used to show that T-T was associated with the Leonid meteor shower that occurs every year in November.

Even though astronomers searched for it in 1899 and again in 1932, Tempel-Tuttle was not seen again until 1965, when it was observed as a faint, 16th magnitude object.

<http://www.lowell.edu/users/farnham/ct/ahist.html>

## LECTURE ON BLACK HOLES, GAMMA-RAY BURSTS AND GRAVITATIONAL WAVES

Professor Maurice van Putten LIGO Research Group MIT  
On the 2nd of July 1967, the US military satellites detected a flash of mysterious gamma rays coming from space. Despite looking for the radiation produced by the explosion of thermo-nuclear bombs, the military had discovered what are now known as gamma-ray bursts (GRBs).

Shining as brightly as a million trillion suns yet seldom lasting even one minute, GRBs were a great astronomical mystery only recently solved when they were conclusively shown to be linked to cataclysmic explosions called supernovae that mark the deaths of very

massive stars. Since GRBs mark the creation of a new-born black hole, GRBs are also predicted to be strong sources of gravitational waves, or ripples in the fabric of space-time. The detection of gravitational waves associated with GRBs will open a new window to probe the formation of possibly the most exotic object in the Universe, a black hole.

Professor Maurice van Putten has been working in the field of high energy astrophysics since 1992. He has held research positions at Caltech, Cornell University and is currently assistant Professor of mathematics at MIT. He is an expert on modelling the

emissions from rotating black holes and has published his research in prestigious journals such as Science and Physical Review Letters.

**6 PM - THURS  
23 OCTOBER 2003  
ROSS LECTURE THEATRE,  
SCHOOL OF PHYSICS  
FAIRWAY ENTRANCE NO.2  
UWA**

For further information, or a PDF version of the flyer for this public lecture please contact Katrina on Ph 9360 2865 or <http://wwwphys.murdoch.edu.au/waaip>  
Contributor: Giuseppe L.A. Coletti (Joseph).

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## PERTH OBSERVATORY VOLUNTEERS GROUP INC.

### VOLUNTEER MEMBER LIST

Jeff Alcroft  
Dick Alderson  
Jeanne Bell  
Trevor Beardsmore  
Lyll Bell  
Frank Bilki  
Tony Beston  
Ric Boelen  
Eve Cowlshaw  
Giuseppe Coletti  
Peter Crake  
Trevor Dunn  
David Emrich  
Keith Ford  
Marcel Fortsch  
Mike Freeman  
Lynda Frewer  
Bevan Harris  
Don Hartley  
Mark Haslam  
Nigel Healy  
Bert Hollebom  
Karen Kotze  
Erin Lalor  
Vic Levis  
Rob Loney  
Andrew MacNaughtan  
Len Martin  
Jacquie Milner  
John Morris  
Lloyd Robinson  
Sascha Schediwy  
Val Semmler  
Vera Smith  
Bob Taylor  
Patricia Turner  
Elaine Walker  
Sandra Walker  
Matt Zengerer

### PERTH OBSERVATORY STAFF

Dr Jamie Biggs	Director and Govt Astronomer
Peter Birch	Astronomer
Ralph Martin	Astronomer
Dr Andrew Williams	Astronomer
Rick Tonello	Astronomer Assistant
Greg Lowe	Astronomer Assistant
Janet Bell	Administration Officer
Di Johns	Clerical Officer
Arie Verveer	Technical manager
John Pearce	Mechanical technician
David Tiggerdine	Maintenance Person
Mark Appelhof	Cleaner

### POVG VOLUNTEERS

Trevor Dunn	POVG Inc, Chairperson
Karen Koltze	POVG Inc, Vice Chair
Bob Taylor	POVG Inc, Secretary
Bevan Harris	POVG Inc, Treasurer and newsgroup moderator (contact bevan on <a href="mailto:ngc2070@bigpond.com">ngc2070@bigpond.com</a> )

### HAVE YOU JOINED THE VOLLIE NEWSGROUP YET?

If you've got any news, information or pix simply post them on the newsgroup for all (newsgroup members only) to enjoy or respond to.

To join simply send your email address to BEVAN HARRIS at:  
**[ngc2070@bigpond.com](mailto:ngc2070@bigpond.com)**

To unsubscribe send an email to:  
**[perthobsvollies-unsubscribe@yahoogroups.com.au](mailto:perthobsvollies-unsubscribe@yahoogroups.com.au)**

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