



COFFS HARBOUR ASTRONOMICAL SOCIETY INCORPORATED

MINUTES AND NOTICE OF MEETING

MINUTES OF MARCH MONTHLY MEETING HELD AT BOAMBEE HALL, MONDAY 5 MARCH 2012 AT 7:00pm.

PRESENT: 6 members and 2 visitors.

MEETING OPENED: 7:05pm with President, Win Howard in the chair.

APOLOGIES: Peter Black, Roy Derrett

MINUTES OF LAST MEETING: adopted as circulated by e-mail.

BUSINESS ARISING FROM MINUTES: Nil

CORRESPONDENCE:

IN: From Peter Black: Advising that due to health reasons he has to resign from his position of Vice President of the Society.

OUT: Nil

MATTERS ARISING FROM CORRESPONDENCE: Peter Black's resignation was accepted with great reluctance. It was moved that in respect for him the position of Vice President be kept vacant until the Annual General meeting in August when he will hopefully be well enough to renominate. Of course the Society wishes Peter the best possible outcome.

GENERAL BUSINESS: Nil

REPORTS FROM MEMBERS:

- 1) From Terry Gill: last Thursday on 1 March 2012 Terry was looking at the Moon about 6:00pm, hoping to again observe the elusive "X" on the moon in the region of Werner crater. It was too late and the terminator had already passed with that area in sunlight. Terry then directed his attention to the nearby area of Rupes Recta (the

straight wall). When illuminated at the correct angle this feature is easily seen in a small telescope and can also be clearly seen in binoculars. Terry looked at this area each hour until the moon set around 11:00pm. By this time the light was on the top edge of the escarpment but the sun was not quite high enough to see the edge of the shadow below. Anyone wanting more information on the straight wall could start by looking at <http://www.astro-nut.com/lunar-03feb09.html> .

- 2) From Robin Nicols: Robin has purchased a new telescope which is similar to the portable scope that Win Howard often brings to meetings. Robin's is the improved model with GOTO function. Robin is currently enjoying viewing celestial objects as he familiarises himself with the scope. The GOTO function is a bit of a challenge so far.

REPORTS FROM THE PRESIDENT: (this material is collected from the internet each month and presented in an edited form).

1. NASA's IBEX spacecraft has detected matter in our solar system that is distinctly different to that normally found here. This matter has apparently come into the solar system from outside. They have directly measured four different types of atoms that do not match anything found here. They are particularly interested in measuring the ratio of neon to oxygen. More details at http://science.nasa.gov/science-news/science-at-nasa/2012/10feb_alienmatter/ .
2. Scientists have detected an apparent dramatic slowdown of the rotation of Venus over the last 16 years. They are convinced that the rotation rate has actually decreased, but only by about 6.5 minutes in one Venetian day (which corresponds to about 243 earth days). More at <http://www.abc.net.au/science/articles/2012/02/15/3431586.htm> .
3. There is considerable discussion going on about the actual size of the universe. A simple way of thinking about it is that it is about 13.75 billion years old so it should be about twice that width in light years if the light from the big bang travelled at the speed of light since then. This gives a size of about 28.5 billion light years across. A number of things muck this simple thinking up. The current estimate is about 93 billion light years. If you want an explanation see <http://www.abc.net.au/science/articles/2012/02/22/3436134.htm> .
4. A new study indicates that the moon may not be as inactive as previously thought. High Resolution images from NASA's Lunar Reconnaissance Orbiter show that some areas of the moon have recently been pulled apart by expansion while others are showing evidence of contraction. These changes are estimated to have happened a mere 50 million years ago. Read more at <http://www.abc.net.au/science/articles/2012/02/24/3437977.htm> .
5. Astronomers believe that they have confirmed the existence of a distant exoplanet that has a thick and steamy water atmosphere. The planet is called GJ 1214b and orbits a star in Ophiucus. Details of the planet are at http://en.wikipedia.org/wiki/Gliese_1214_b .
6. It appears that the Keck interferometer in Hawaii may not proceed. This is where the two telescopes act as a single scope giving the effect of a scope 85m across. One of the reasons for this is that there is a dispute with the native Hawaiians that was resolved in court recently. The resolution was not in favour of the

interferometer. Read more at

<http://www.skyandtelescope.com/news/home/139509093.html> .

7. More on Dark Matter. A group of Japanese physicists believe that they can show **where** dark matter is, even though they cannot say **what** it is. They believe that it is almost everywhere. They sat that “Intergalactic Space” is an incorrect term as that “space” contains a lot of dark matter. Those interested in this fascinating (for some) topic can look at http://www.space.com/14559-dark-matter-intergalactic-space.html?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+spaceheadlines+%28SPACE.com+Headline+Feed%29 .
8. It appears that the James Webb telescope which is planned as the replacement for Hubble (although it is a different type) has run into a further delay in its launch. Problems seem to be adding up for this scope, read about the latest in <http://www.smh.com.au/technology/sci-tech/the-mother-of-all-telescopes-runs-into-the-mother-of-all-delays-20120221-1tljr.html> .
9. In September 2011 there was a report from the Large Hadron Collider that they had measured particles (neutrinos) travelling faster than light. Neutrinos have mass so this should not be possible according to all thought since the early 1900’s. Guess what? Didn’t happen! They have now discovered a bad connection in one of the GPS circuits used to measure the speed of the neutrinos. This bad connection gave a faulty reading. When the connection was fixed the reading was as expected according to theory.

CLOSURE AND FUTURE MEETING TIMES:

The next monthly meeting will be Monday 3 April, again at Boambee Hall at 7:00pm, all members and interested persons are encouraged to attend.

Meeting closed at 8:41pm.

VIEWING

The notes in the meeting minute book simply state, “Full cloud, lots of rain.” What more needs to be said?

Terry GILL
Secretary