



# **COFFS HARBOUR ASTRONOMICAL SOCIETY INCORPORATED**

## **MINUTES AND NOTICE OF MEETING**

### **MINUTES OF NOVEMBER MONTHLY MEETING HELD AT BOAMBEE HALL, MONDAY 1 NOVEMBER 2010 AT 7:00pm.**

**PRESENT:** 9 members.

**MEETING OPENED:** 7:06 pm with President, Win Howard in the chair.

**APOLOGIES:** Brett and Jacquie Connolly

#### **MINUTES OF LAST MEETING:**

- i) The minutes of the September 2010 meeting were adopted as circulated by e-mail.
- ii) October 2010 had no meeting so there were no minutes to adopt.

**BUSINESS ARISING FROM MINUTES:** Nil

#### **CORRESPONDENCE:**

##### **IN:**

- 1) From Duncan Waldron advising that the Society Website is now located at <http://coffsastro.weebly.com/index.html> and has been updated.
- 2) From Jacquie Connolly advising about her car accident and inability to attend the November meeting.
- 3) From Rosemary Yates advising the “Wild on Earth” weekend function at Mt Hyland Wilderness Retreat on 27-28 November, and requesting a guest speaker on astronomy.
- 4) From Solis, Sydney regarding outdoor lighting.
- 5) From Grand Pacific Tours advising an upcoming 9-day tour of New Zealand.
- 6) From Quasar Publishing advising availability of “Astronomy 2011” magazine and discounts for bulk orders.
- 7) From Bananacoast Credit Union advising the details of their AGM.

**OUT:** Nil

**GENERAL BUSINESS:** That there was no guest speaker available to attend the Wild on Earth function. Unless one could be found Ms Yates be contacted and advised of this. (She was contacted and so advised on 7 November.)

**REPORTS FROM MEMBERS:**

- 1) From Roy Derrett: Roy investigated the telescope that was advertised for sale in the minutes of the September meeting. He has more details if anyone is interested.
- 2) From Terry Gill: Terry recently had the pleasure of showing a friend the view through a telescope for the first time. It is always good to note the reaction when someone first sees the moon through a scope. There is nearly always an immediate noise of appreciation, and this was certainly the case this time.

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

1. A census of nearby stars suggests that there may be an Earth-like planet (of similar mass to the earth) circling around one quarter of the stars in our galaxy. If this is true then there could be about 50 billion such planets in the Milky Way. More details at <http://www.brisbanetimes.com.au/technology/sci-tech/space-census-shortens-earthly-odds-20101029-177iy.html> .
2. Another record has been broken: the most distant object ever seen is now a galaxy named UDFy-38135539. It was found as a faint dot on a Hubble picture and has been confirmed with the Very Large Telescope in Chile. The galaxy is in the constellation of Fornax.
3. Further confirmation that there is significant water hidden in the deep shadows in some craters on the moon. More analysis of the data from the plume sent up as the probe crashed into the moon recently indicates that it was about 5.6% water. Read more at <http://www.smh.com.au/world/science/scientists-find-ice-at-south-pole-of-moon-20101022-16xs4.html> if you are interested.
4. On 12 October another small asteroid went past earth at a very short distance. This asteroid was about 10m across and missed us by only 45000km. The report goes on to say that an asteroid about 5m in size passes within one lunar distance of the earth nearly every day and one reaches the atmosphere about every two years. More details at [http://www.msnbc.msn.com/id/39635492/ns/technology\\_and\\_science-space](http://www.msnbc.msn.com/id/39635492/ns/technology_and_science-space) .
5. Astronomers have found an Earth-sized planet orbiting in the habitable zone of a nearby star. The planet has a diameter 1.2 times that of earth and a mass of around three times ours. The star is only about 20 light years away. The star is called Gliese 581 and has been studied carefully for many years. So far six planets have been discovered around this star. For those who want to have a look at this star it is a red dwarf in Libra, with a magnitude of 10.5, meaning it is well out of naked-eye visibility. It should be possible to see with a telescope and is located at RA 15hrs 19.5' and Dec -07° 43.3'.

6. A question that is sometimes pondered runs along these lines: To make planets, stars, etc you need matter, yet most standard theories suggest matter and anti-matter were created in equal amounts that annihilate each other!! Why do we exist? It has been calculated that a surplus of one particle of matter per billion would have been enough to give us the matter we know. Some reactions have shown a slight “pro-matter bias” but nowhere near this level. Read more at <http://www.newscientist.com/article/mg20727795.500-cosmic-accidents-tipping-the-antimatter-balance.html> if this line of argument appeals to you.
7. A recent experiment indicates that (as Einstein predicted) time passes at a different rate if you are higher up (less gravity) or moving at a different speed. The effect is very small and can now be measured due to the development of the “quantum logic atomic clock” which is accurate to one second in 3.7 billion years. The experiment indicates that if you stand a couple of steps higher on a staircase then you will age faster by about 25 billionths of a second over about 79 years!!! More on this fascinating topic at <http://www.abc.net.au/science/articles/2010/09/24/3020197.htm> .

#### **CLOSURE AND FUTURE MEETING TIMES:**

The next monthly meeting will be Monday 6 December 2010, again at Boambee Hall at 7:00pm, all members and interested persons are encouraged to attend. This will be the last meeting for the year and members are reminded that, as usual, there will be no meeting in January.

Meeting closed at 8:30pm.

#### **VIEWING**

Once again the night was not good for looking at heavenly bodies. There was full cloud and not even Jupiter could be seen,

Terry GILL  
Secretary