Issue: November 2015

>>> <u>Ayrshire Astronomical Society Newsletter</u>

Next Meeting:



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Equipment Night

25th January 2015

An evening to look and talk about telescopes of various types, solar scopes and viewing, cameras and Imaging, software and books. Get help with your own kit – bring it along.



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Telescope Corner:See some scopes get help with yoursSolar Corner:Get into solar observingImaging Corner:See some kit get some tipsPlus - if you have any interesting or surplus kit bring it along for
the Books and Bits corner.

Events : Christmas Meal 7th of December



The Christmas meal will take place this year at The Tree House in Ayr meeting at 7pm at the venue. It will be another good night out with a chance to relax and chat with your friends. Make sure you are there

Presidents' Word

Christmas Looms.



Yes! here we are its Christmas again; your annual opportunity to stuff yourself until you feel ill, watch all those boring old repeats on the telly and generally be miserable. Alternatively you could make sure that your Santa list is full of exciting astro goodies and then, on Christmas day, repair to the shed or observatory and have fun.

With a bit of luck we might even get some clear skies and you can do some imaging or observing – maybe even both.

Better still - how about in January we have a quick "competition" for the best Christmas Astronomy related image? Be creative and perhaps a bit silly but keep it tasteful – let's have a laugh. Bring your entry along to the meeting.

Whatever you do enjoy yourself over Christmas and New Year here wishing you lots of fun and all the best.

Wanted: Newsletter Editor



Well, I have been watching my in box for the last few weeks and also the mail box but so far I haven't noticed a flood of applications. The job is still there and needs to be filled so have a think and have a go.

Exoplanet Competition: Another Update



Well would you believe it the announcement of the winners has been delayed again? Initially mid August, then mid November, now Mid December. Maybe Santa is involved here and he is a bit busy at the moment – we wait with baited breath and perhaps a glass or two of sherry





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Alex's Space



Polar Planet

Is the Earth really magnetic, and if so, where does its' magnetism come from? The answer isyes! the Earth is indeed magnetic . It makes its' own electricity in its core, with both liquid and solid parts whizzing round at different speeds like a bicycle dynamo ---remember them? That electricity then generates magnetic fields to produce the well known magnetic properties of the Earth.

The previously held theory concerning the Earths' magnetism was that it was

simply due to iron contained within its' core. This explanation was undoubtedly due to the known magnetism of iron, but, since a metal magnet once heated loses its' magnetic properties, the iron in the core of the Earth would be far too hot to produce the desired effect alone.

It is known that the polarity of the Earths' magnetic field has changed a number of times, North has become South and then flipped back. There is also steady drift of magnetic North ... all very strange. Do you know why this has happened? If so, please then pull out your pen and write a short explanation for the next Newsletter – let us all know and get your name in print.

Things Venutian

Ten things you might not have know about Venus

- 1) Venus is the only planet in our Solar System that rotates in the opposite direction to its orbit around the Sun.
- 2) Venus de Milo, the statue which is now at the Louvre in Paris is 6 feet 7 inches tall and has vital statistics of 51 inches, 30 inches and 47 inches ... gosh! The mind boggles!!
- 3) It takes the planet Venus 225 Earth days to go around the Sun and 23 Earth days to rotate once on its axis, so a Venutian day is longer than a Venutian year!
- 4) The Venus de Milo statue was found with its arms missing, they have never been found, though, one stone hand was found confirming that the arms must have existed.
- 5) There are 1900 impact craters on the planet Venus.
- 6) Venus is the 1323rd most popular name for girls in the USA.
- 7) Atmospheric pressure on the planet Venus is 90 times greater than on Earth.
- 8) Some versions of the Venus de Milo depict her bald (Venus Calva) or bearded (Venus Barbata).
- 9) The atmosphere of the planet Venus is mostly sulphuric acid.
- 10) The middle names of Venus Williams the tennis player are ... EBONY STAR !!

Merry Christmas to you all, Alex Baillie



Astronomy Quiz

A change this month from Isabelles' Solar Corner – A tricky quiz

Entries by email to <u>solar@ayrastro.com</u>, or if you have no email then post them to Isabelle before the next meeting – good luck you will need it!

No peeping, no Internet. Every question is worth 1 point, the bonus question is worth 5 points. Should there be a tie, a tie break question - not astronomy related - will be asked. Send your answers to <u>solar@ayrastro.com</u> by latest the 22nd December. The winner receives a £10 Amazon voucher as a Christmas present. Good luck!

Name these countries as seen from space







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12) What spectacular event happened in Siberia in 1908? ______

13) What is the name of the largest known asteroid in the solar system? ______

14) The NASA spacecraft "Messenger" landed on which planet in 2008?

15) What nationality was the astronomer Christiaan Huygens, who in 1655 discovered Saturn's moon Titan?

16) Bonus question worth 5 points



Which US city can you see? _____

Space/Astronomy

Geminids

The Geminid Meteor shower takes place between the 7 to 16 December under largely moon free skies and reaches its peak on the evening of 13-14 December. The radiant is near the star Castor ad you can expect some 0 to 40 per hour and maybe more.

Ursids

The Ursid meteor shower will peak ten days after the Geminids 23 – 24 December with the radiant near Beta Ursae MInoris

Venus

Venus is a bright morning object getting up to magnitude +1.3 by the end of December. Mars is quite close by.

Jupiter

Jupiter is a brilliant morning object and can be seen in the early morning and into early daylight.

Saturn

Saturn is poorly placed at the present time being close to the Sun

Full Moon

Full moon is on Christmas Day at 11:11

A free Monthly star chart is available from;

www.starmap.com

Did You Know?



- A Parsec is the distance at which one Astronomical unit subtends and angle of one arc second. One Astronomical Unit is the exactly 149 597 870 700 meters and is roughly the distance from the Earth to the Sun (roughly because the Earth Sun distance varies during the orbit). A parsec is roughly 3.26 light years or 19 Trillion Miles.
- The nearest star Proxima Centauri is about 1.3 parsec from the Sun 24.7 Trillion Miles
- Most of the stars visible to the naked eye in the night sky are within 500 parsecs of the Sun
- A light year is the distance that light travels in a vacuum in one Julian year about 6 trillion miles
- The distance to the edge of the visible universe is some 14 billion parsecs or 46.6 billion light years

AAS Library

Dear Members:

Welcome to the new AAS Library, I hope you enjoy the variety of books our members kindly put for hire, so we can all have the opportunity to read something different and learn a bit more. Remember, it is only 50p per book; with this small contribution our Society can then buy new books that can help us with our hobby of Astronomy, Space and Astrophotography.

If any of you wish to put some of your books for hire, remember you always keep the ownership on your books, but you can help others to expand their knowledge and get a bit of enjoyment. If you do please send me a list of your books to <u>library@ayrastro.com</u>, a picture of the covers will be good, so I can get them from the internet and put them on our website, so people can see the cover of the book they would like to hire. To the ones without internet facilities we will have some hard copies to bring to our meetings and will try to update this list every month or so.

AAS Library book List:

Update on 5/12/2015



Have your say in our Newsletter; send articles or letters to newsletter@ayrastro.com