South Downs Mercury

The monthly newsletter of South Downs Astronomical Society
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Next Meeting - Friday 3rd May. 7:30pm - Lecture room of the South Downs Planetarium, Chichester.

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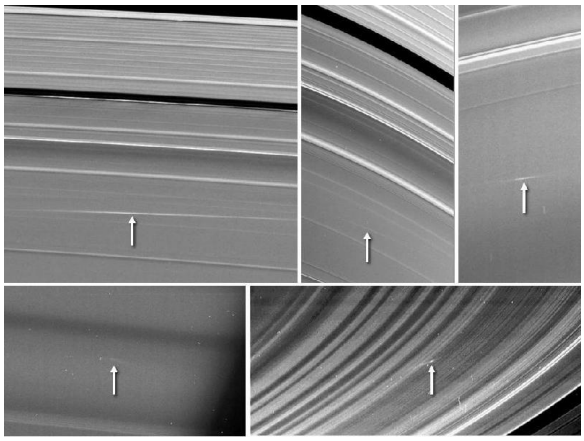
We still have a vacancy for someone to help compile and edit the society's newsletter.

If you think you can help, please contact either Mark (meteoritemark@gmail.com) or speak to a committee member at the next meeting.

In the News:

Ring smashers - Nasa's Cassini spacecraft has observed streams of meteoroids crashing into streams of rubble around the rings of Saturn. This is the first direct observations of meteors hitting the rings.



Meteroids interacting with Saturn's rings. (Courtesy NASA).

Mars Atmosphere Still Dynamic- Mars has lost much of its atmosphere, but recent measurements from the Curiosity Rover, have revealed it's atmosphere still very much has reactive chemistry going on.

The gas analysis module (SAM) found that the Martian atmosphere has about four times as much of a lighter stable isotope (argon-36) compared to a heavier one (argon-38). This removes previous uncertainty about the ratio in the Martian atmosphere from 1976 measurements from NASA's Viking project and from small volumes of argon extracted from Martian meteorites.

The ratio is much lower than the solar system's original ratio, as estimated from argon-isotope measurements of the sun and Jupiter. This points to a process at Mars that favored preferential loss of the lighter isotope over the heavier one.

Things to look for in May 2013

By Roger Burgess.

Two events in May involve the moon, On Sunday, 26 May 2013 at 02:44 BST in Ophiuchus The Moon reaches its closest point to the Earth The Moon at perigee.

On Sun, 26 May 2013 at 11:26 BST also in Ophiuchus the Moon reaches its furthest point from the Sun, The Moon is at aphelion.

Last month Comet Pan-STARRS made a beautiful picture in the Western skies mostly obscured by the awful weather in the UK. On April 4th, in the western sky at sunset, Comet Pan-STARRS made a photogenic flyby of the Andromeda galaxy.

May 2013 is also predicted to be the Sunspot maximum of cycle 24. To date it been very quiet as regards to sun spots. The solar cycle is an 11 year cycle from minimum to maximum and minimum again. Some experts predicted this cycle would be above average, others predicted it would be below average. So far it's been a washout, some of the experts believe cycle 24 peaked in 2011, 2 years early.

We had a long period of solar inactivity called the Maunder minimum that lasted from 1645 to 1715 when the Thames regularly froze during the winter, who knows perhaps we are at the start of a second Maunder minimum, 3 out of the last 4 winters have been colder than those preceding them!