

Ordinary Meeting, 2007 May 30

held at New Hunts House, Guys Hospital, London Bridge, London SEI

Richard Miles, President
Ron Johnson & Nick James, Secretaries

Dr Richard Miles, President, opened the seventh Ordinary Meeting of the 117th session and welcomed members old and new. In the absence of the Meetings Secretary, he asked Martin Morgan—Taylor to read the minutes of the previous meeting, which were agreed and signed. 15 new members were proposed for election, and the 13 proposed at the previous meeting were approved and declared elected. The President asked any new members in the audience today to be sure to come and introduce themselves to him after the meeting.

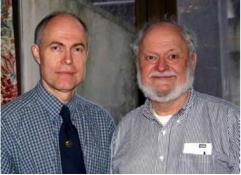
Mr Nick James, Papers Secretary, said that one paper had been approved for *Journal* publication:

The 2008 August 1 total solar eclipse, by Sheridan Williams

Dr Miles said that although the time to submit nominations for Council had formally ended today, Council had decided this afternoon to extend the nomination period to June 22. All members were asked to seriously consider standing for the Council as we would love to see some new faces round the Council table. Our Public Relations Officer, Dr John Mason, was also appealing for photographs of BAA activity, to be sent to him (see address at the back of the *Journal*) for possible use in publicity material.

The President then reminded members that the next general meeting of the Association would be the Exhibition Meeting, to be held this year at the National Space Centre, Leicester, on June 30, and following the summer break the Out of London weekend would take place in Glasgow. In addition, a meeting of the Asteroids and Remote Planets Section would be held at Newbury on the coming Saturday, June 2.

Dr Miles then said he was delighted to introduce the first speaker, Dr Alan Harris,



Dr Richard Miles, President (left) with Dr Alan Harris.Photo by Hazel McGee



The remarkable striated tails of Comet 2006P1 (McNaught), photographed from Mt Paranal, Chile on 2007 January 20 by S. Dieries (ESO).

from the Space Science Institute in Boulder, Colorado. Dr Harris had worked at the Jet Propulsion Laboratory from the mid-1970s until 2002, and although now formally retired was still active, particularly in the field of binary asteroids. Dr Miles had thought of him as his mentor for at least 25 years, and it now gave him great pleasure to ask Dr Harris to speak on the impact hazard to Earth from asteroids. (See report of Dr Harris' talk on page 166).

Following his fascinating talk, Dr Harris answered questions from the audience and was warmly applauded. The President then introduced the second speaker, Dr John Mason.

Meteor showers – a new perspective ■ for 2007

Dr Mason said that compared with a few years ago, we had entered a new era of understanding of meteor showers and their origins. Meteors were known to be primarily composed of dust given off by comets in the active phase of their orbits – it was estimated that Comet Hale–Bopp, for example, gave off around 1000 tonnes a second of dusty material during its recent visit to the inner solar system. The spectacular striated tails of Comet McNaught were a good illustration of the

filamentary patterns of dust emission. The filaments entered orbit as streams of meteoroids, often being perturbed as they passed by planets, and gradually spreading out over thousands of years into the background of the solar system.

Until recently researchers had not been able to model the activity of individual filaments of specific meteoroid streams, but with the advent of greater understanding and more powerful computer systems this was now becoming possible. Famously, David Asher and Rob McNaught modelled the filaments that gave rise to the Leonid storms of the past few years, in many cases predicting the individual peaks of the showers to within a few minutes of the actual observed peak, a remarkable achievement.

2007 should bring several good opportunities for meteor observers. The August Perseids were reliable and dependable, and this year's shower coincided with a New Moon on August 12. It was recently found that Perseid rates were not constant, with a strong filament superimposed on the background by Comet Swift—Tuttle at its return in 1992. This gave a notable early peak to the shower at the predicted position in 2005, but it was probable that this enhanced activity had now passed and that the 2007 shower would revert to normal rates.

Last October the Orionids produced an unexpected burst of activity: would this be repeated this year? There was only one way to find out! Similarly the November Taurids had a very bright burst in 2005, but this has

not re-occurred. The Leonids, also in November, have probably now gone back to their pre-storm levels, but this shower has produced so many surprises in the past, how can we predict what it will do? Finally we have the Geminids, probably now the most active meteor shower of the year, surpassing the Perseids in activity, and occurring during the long nights of December with the most hours available for observation. In summary, there had never been a better time for observing meteors, and our greater understanding of the mechanisms behind the events we observe just made it even more fascinating.

Following applause for Dr Mason's enthusiastic and dynamic talk, the President himself presented the monthly Sky Notes. He described current space activities: NASA/ESA's *Cassini* probe was conducting further spectacular flybys of Titan, cul-

minating with an orbit on May 12 which approached to within 900km of the surface of the satellite. On June 5, *Messenger* would fly by Venus on its way to Mercury, and June 30 would see the launch of the *Dawn* mission, which would visit the dwarf planets Vesta and Ceres, entering orbit around both. Members had photographed the occultation of Saturn by the Moon on May 22, and Terry Lovejoy had discovered his second comet from Australia.

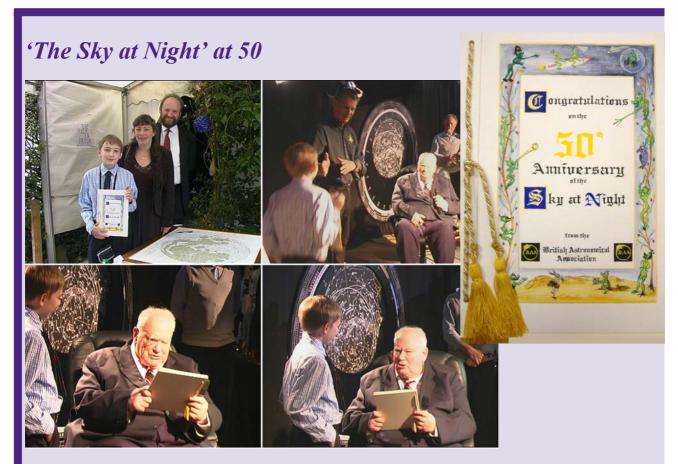
Turning to variable stars, Dr Miles described the observing campaign co-ordinated by Gary Poyner on the remote blazar OJ287, which was predicted to outburst in September, helping to confirm some significant theories about the nature of this enigmatic object. More observers were needed and should contact Gary for information. Meanwhile Gary himself had passed a notable milestone, having recorded his

200,000th variable star observation! (Members applauded this announcement).

Dr Miles then introduced Mike Maunder, who briefly described and showed images of three events which he had recently attended. The first showed members of his local society at a public display to observe the total lunar eclipse of March 3. He then showed photos of two gatherings held in honour of Sir Patrick Moore: a party organised by the BBC at 'Farthings' (Sir Patrick's well-known home in Selsey) to celebrate the 50th anniversary of *The Sky at Night* TV series [see below], and a congregation of Patrick's friends at Chichester Planetarium.

The President then adjourned the meeting until the occasion of the Exhibition Meeting, 2007 June 30, at the National Space Centre, Leicester.

Hazel McGee



On 2007 April 24, the BBC's Sky At Night programme and Sir Patrick Moore (a BAA member for more than 70 years) celebrated 50 years of continuous broadcasting: the world's longest running television programme with the same presenter. Many astronomers, amateur and professional alike, have been inspired by Patrick and the programme over the years. Following a suggestion by one of our younger mem-

bers, Philip Jennings, the BAA gave members and others an opportunity through the BAA website to send a personal greeting to Patrick on this unique achievement. The hundreds of messages were inscribed in a special folder and presented to Patrick at a party organised by the BBC at his home. The photos (taken from a video by Richard Miles) show Philip presenting the card to Patrick at the party.