

# ASTRONOMY SECTION REPORT 2015 – 2016 session

## New Session began Sept 18th

The new session of open nights began on September 18<sup>th</sup> but there were no bright planets to show as all the action was in the pre-dawn sky. In early October a brilliant Venus was in conjunction with Jupiter and Mars, and if you had a low clear horizon, you could also see Mercury joining in. At some stage the scene was accentuated by the star Regulus and a thin last crescent moon. With all that going on just before dawn, it was not surprising that the evening sky was positively dull in comparison – we had to show visitors double stars.

## More photography at the Observatory

Towards the end of October, Doug was approached by the Daily Telegraph, seeking permission for a photographic session at the Observatory for one of their articles. The subject was to be an interview with Jon Culshaw the TV impressionist who, coincidently is on the Sky at Night team and a frequent visitor to the Observatory.

The group arrived at 3:00 pm and the session went on until 6:00 when due to darkness falling, the action continued at the Holly Bush.

## **Grim weather and special openings**

The weather this session was/is the worst that I can remember. Since opening in mid September, there have only been 4 clear weekend nights until February 16<sup>th</sup>. Not surprising, people are becoming frustrated so Simon & John Tennant decided to open the observatory when a clear night was predicted. As luck would have it we managed two nights in succession on 13<sup>th</sup> and 14<sup>th</sup> of Feb. The sky remained clear and we had a good Moon a few days before first quarter. A small contingent of visitors turned up but given the short notice this was to be expected, but it allowed time to look at the moon and some of the other interesting objects in the winter sky in an unhurried manner, which is as it should be.

Because of the poor weather it was decided to extend the open nights the Observatory until May  $22^{nd}$  as Jupiter is now well placed for observation. Opening times changed to 9:00 pm until 11:00 pm as the sky is still light at 8:00pm. Apart from Jupiter we also have Mars in opposition on May  $22^{nd}$  and Saturn on June  $3^{rd}$ , but both planets will be very low in the south.

# Transit of Mercury May 9th 2016

The last transit of Mercury took place on May 7<sup>th</sup> 2003. On that date the weather was fine and the whole transit was observed. Having endured the cloudiest session of open nights in memory, we didn't hold out many hopes of getting a good view this time. The day before – Sunday 8th was the warmest day this year (so far) with cloudless skies but the Met. Office was predicting total cloud cover for the 9<sup>th</sup> with rain by mid afternoon. In the event, the Met. Office got it wrong again and Monday 9<sup>th</sup> dawned fairly clear with patchy cloud. As the transit lasted from 11:12:23 until 18:40:33 – fully a little over 7 hours, we expected to see at least some of it. We opened the Observatory to visitors and during the course of the day about 80 or so availed themselves with the opportunity to observe this uncommon event. By late afternoon, the Met. Predictions were realised and by 5:00 pm it was raining. But we did see most of the transit.

#### Hampstead Scientific Society

Quite a few Members, Demonstrators and Assistants turned up during the course of the day and all who attended were rewarded with the sight of the diminutive disk of Mercury slowly progressing across the solar disk, reinforcing the comparison between the vast size of the Sun and the tiny planet orbiting it.

Many visitors came equipped with digital cameras and smart phones and they all went away with images of the event; how things have changed in the last few years!

#### **End of Session**

The current session of open nights/days ended on Sunday May 22<sup>nd</sup> with a last look at the Sun. Without doubt this session has experienced the fewest clear nights (at weekends) that I can remember and consequently low visitor numbers. Is it the fault of 'el-nino'? All being well we will re-open to visitors in mid September. My attendance has also been poor this session since I managed to crack my left humorous in two places when I slipped on wet leaves on December 10<sup>th</sup> following an HSS lecture meeting. Coincidently, our solar expert Brian Bond suffered a similar fate falling and hitting his face on the pavement. These accidents meant that other demonstrators had their workload increased as Brian and I were effectively out of action for much of the session. My sincere thanks to Simon and all our team for stepping in to provide cover. As usual thanks to all Demonstrators and Assistants for their continued help and to Julia for looking after the roster and the section's finances.

Doug Daniels (Joint Astro. Sec.)

