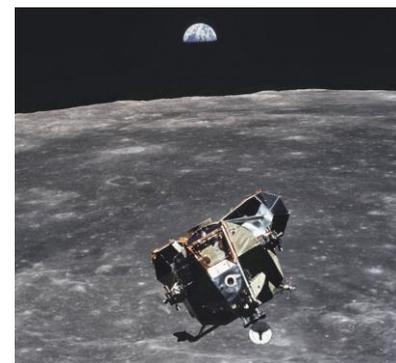


Edited by Robert Shanks

Welcome to this commemorative edition of the Blackburn Leisure Astronomical Society newsletter.

For better continuity, the society has agreed to move the newsletter publication date to on or around the 2<sup>nd</sup> week of each month. Remember this is your newsletter. If you wish to contribute, please pass me your submissions at the monthly meeting or email in the week after... All contributions are welcome!

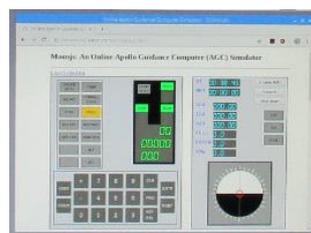


## Apollo 11 Anniversary

BLAS opened its doors on July 20<sup>th</sup> to celebrate the 50<sup>th</sup> anniversary of the day that everyone on Earth looked up in awe at history being made. Twenty five visitors along with Radio Humber, popped in to see what we do and share their memories of man's greatest



achievement, that of landing a man on the moon and returning him to Earth safely. On display were various items including original newspapers; films of the time; a lunar globe showing the positions of the Apollo landing sites; a Lego lunar lander; a Saturn 5 model and a simulation of the Apollo Guidance Computer running on a modern Raspberry Pi mini computer courtesy of Andy Russell.

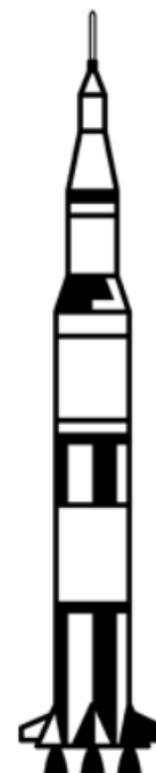


Apollo undoubtedly changed the way we see our world as illustrated in the top right photo, taken by Michael Collins. This shows the lunar module returning from the moon with the Earth in the background. A single



frame showing everyone alive at the time except Mike Collins! A "selfie" was unheard of in 1969 but if Michael Collins had put himself in the shot above, he would have captured the whole of humanity alive at the time in a single frame.

[Apollo 11 \(2019\)](#) has been showing in independent cinemas. The film collates never before seen, re-processed 70mm wide angle archive footage. The film shows all 8 days of the journey to the moon and return to Earth from never before seen camera perspectives. It includes views from: the firing room; mission control; co-co beach; launch pad 39A; the spacecraft and the recovery carrier. It is narrated throughout by launch control and contains re-processed footage of the lunar orbits and the moonwalks which were heavily compressed to be sent back to us via radio links. Five years in the making, this film has changed the way I perceived history, which has only ever been seen through the narrow field views of the CBS news outlets of the time. [Go see.](#)



Edited by Robert Shanks

## Last Meeting

The 22<sup>nd</sup> July meeting covered feedback from the moon landing

day and a lecture was given by Andrew Davis on the use of medical X rays and detectors drawing parallels between the medical industry and Astronomy. The talk included X ray observations from spacecraft. Check out Youtube video of [supernova 1987A](#)

## Lunar Eclipse

A lunar eclipse occurred on the 16<sup>th</sup> of July. Despite the best attempts of typical British weather, George King managed to snap this picture!



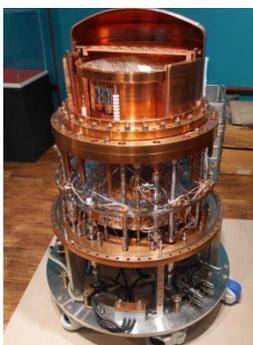
## Other News...

The roof around dome 2 has suffered a damp problem due to water ingress over time. Repairs to dome 2 have now begun with the removal of the existing steel roof.

## Dark Matters!

80% of the matter in our Universe is

dark. Its effects are seen everywhere but its detection remains elusive to modern Astronomy. The museum of Whitby recently hosted an exhibition of the [Zeplin III](#) dark matter detector which was used for some 3 years in a mine 1100m below ground to shield it from surface radiation. The machine proved the concept that a machine of this type should be able to detect dark matter but needs to be scaled up. The hunt continues...



## BLAS Outreach

The BLAS Astronomy for

Beginners course culminated in a workshop on Astro photography. These lectures were so successful that there are plans underway to run them again at the back end of the year. To date 151 people have attended over the course of the 10 talks! Thanks to all who have contributed to this endeavour! To date this year BLAS have hosted some 10 talks and hosted 2 Scout groups.

## Radio Astronomy Gathers Pace!

Thanks to the GRAVES (Grand Réseau Adapté à la Veille Spatiale) space surveillance radar in Dijon, France, we are able to utilise the principals of RADAR and use a Radio receiver, to hear the reflections from the ionised trails left by meteors entering the Earth's atmosphere. To date various successful observations have been made with this method and a short presentation was made at the beginners session on August 1<sup>st</sup>. A wider understanding and longer term plans will be communicated to the membership at next meeting. The [Perseid meteor shower](#) is currently underway which has also given us a great opportunity to gather more observations which will be shared in due course.

## This months caption competition.



Answers via email to [Brian Davies](#) please!