Astronomy Talk 1st December 2020

Apollo – the Sequel

This was a "Zoom" talk given by Dr David Whitehouse, former BBC Science Correspondent

The talk was based on David's new book "Space 2069", looking to the future 100 years after Apollo 11 landed on the Moon.

There has been a lot of robotic exploration of the Moon, especially around Shackleton crater at the south pole, which has perpetual sunlight and ice in the perpetual darkness of the crater. We expect Moon landings with people soon, 2024 to 2026, and this would be an ideal place for a base. The problem is the political wind blows in all directions, and this is a long-term project. The Artemis project includes other nations, especially Europe to work on the Moon landing.

All sorts of technology will be needed to make a base work. 3-D printers to make equipment. Processing and compaction of the dusty surface, especially extracting water.

We then looked at a Mars landing: it has similar problems to the Moon. It's essential to make a Moon base work first so we have the knowledge needed for a Mars base. We looked at the human body problems of a 10-month flight, which may be very severe. A rotating craft to provide some gravity may be a partial answer. Perhaps we can speed up the flight to make it 3 months, which would be much more manageable.

David had many excellent slides and videos. He's hopeful we can reach Mars by the 2069 date.