

Astronomy Talk 12th July 2022

Watching Space Dust

Simon Holbeche, chairman of Bath Astronomers gave us this talk on Zoom. There were 47 attending. Meteoric dust is falling everywhere all the time, it's estimated about 10^{11} particles a day. The idea that rocks could come from the sky was suggested for the first time by Ernst Chladni in 1794, and a 25 Kg meteorite that landed in England in 1795 gave credence to this.

Simon then talked about the Zodiacal light, and told us that the Juno probe had shown that much or all of it comes from impacts on Mars blowing material into interplanetary space. Some of the meteorites and meteors come from asteroids, and some from comets: some of it is thought to be older than the solar system.

You can photograph meteor showers, most of which are from the tails of comets, but Simon suggests a warmer way would be nice! You can track the ionised trail of objects using the reflected signal from the French satellite tracking radar system near Dijon. He then showed us camera setups for remote all sky viewing, preferably using several smaller cameras, which cost about £200 per camera.

There are a large number of people doing this as members of UKMON, the UK Meteor Monitoring Network, and this enabled the Winchcombe meteorite in 2021 to be found fairly easily by tracking its trail, although the last part of the trajectory is cold and not showing the cameras.

A great many questions followed, as this talk, and Simon's enthusiasm, generated a lot of interest.