## Astronomy Talk 13th July 2021

## **Interacting Galaxies**

Our speaker for this Zoom talk was William Joyce. There were 62 attendees.

William started by covering the different sorts of galaxies. He gave an explanation of many different types of structure with illustrations.

Galaxies are not very widely spaced in the universe in relation to their size and many of them interact. He covered interactions, again with many illustrations.

He then continued by looking black holes and different apparent types of jet, e.g. M81, including blazars and quasars, which are generally viewed as being the same type of object but seen from different angles.

These very active galactic nuclei are all in the distant past and distant universe, it is thought because the black holes that power them may have run out of fuel. Seyferts are galaxies that may be intermittently active.

Galaxy mergers is another area that he was well able to illustrate, including a simulation of the merger between the Andromeda galaxy M31 and the Milky Way. The merger of the central supermassive black holes sometimes happens, but often there are 2 such black holes which will presumably merge eventually.

William commented that active galaxies is a very hot research topic.

There were many questions, so the talk on this subject was very stimulating.