

Astronomy Talk 22nd November 2022

The Birth of the Solar System

This talk was given by the chairman. We started by looking at what theories need to address, followed by what happened before the solar system formed: where the dust comes from and the composition of solar dust cloud.

Then historical theories were covered, leading to the process as accepted today. The early formation details included disc formation and the T Tauri stage.

Until recently we had a very different idea of planetary formation compared to what we think today. In particular, Jupiter's evolution, which included where it formed, the "Grand Tack", and effects in the inner solar system. Further evolution included the Nice-2 model and the late bombardment.

We then looked at the planets as we see them, and then at satellites. Various Earth - Moon formation theories were explained. Finally, we covered other objects, such as asteroids and very distant objects such as Kuiper Belt Objects and The Oort Cloud. This also included the reasoning behind the possible "Planet 9".