

Astronomy Talk 3rd June 2017

Asteroids

This talk was given by the chairman. It covered the following areas:

History, including the Titius-Bode Law and the development of ideas.

What are they? Not comets! Various types, e.g. C, S, and M; Vesta.

Where are they? In the main asteroid belt; Jupiter's Trojans; Centaurs; the Kuiper Belt; the Scattered Disc.

How did they form and get there? Planetesimals; collisions; Jupiter's gravity; Type Ds; the "Grand Tack"; the Nice model.

Orbital effects, covering Trojans; Kirkwood gaps; Hildas; Centaurs; eccentricity and inclination.

Asteroid encounters by space probes: Galileo (Gaspra & Ida); NEAR-Shoemaker (Mathilde & Eros); Rosetta (Steins & Lutetia); Hayabusa (Itokawa).

NEOs risk: project Spaceguard; Centaurs; sources of large impactors.

What can we do about it? Divert it; other solutions.