



The rings of Saturn are the most extensive ring system of any planet in the Solar System. They consist of countless small particles, ranging from µm to m in size, that orbit about Saturn.

The ring particles are made almost entirely of water ice, with a trace component of rocky material. Shepherd Moons orbit within, or just beyond, Saturn's ring system. They have the effect of sculpting the rings: giving them sharp edges, and creating gaps between them. Saturn's Shepherd Moons are Pan, Daphnis, Atlas, Prometheus and Pandora.

These moons probably formed as a result of accretion of the friable ring material on pre-existing denser cores. The cores with sizes from one-third to one-half the present day moons may be themselves collisional shards formed when a parental satellite of the rings disintegrated.

The masses of the Shepherd Moons (x 1015) in ascending order are: Daphnis (0.084) - Pan (4.95) - Atlas (6.6) - Pandora (137.1) - Prometheus (159.5). We have mapped these masses to the durations of the tracks.

Notes adapted from Wikipedia



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