



Comets and the Young Solar System (David Bates Medal Lecture)

H. Rickman

Uppsala Astronomical Observatory, Sweden

I will focus my talk around four outstanding problems concerning comets and the early Solar System.

How were comet nuclei formed, and what was their initial size distribution?

In which way could suchicy planetesimals have delivered volatiles to the planetary embryos in the terrestrial planet region?

How large was the Sun's birth cluster, and what implications does this have for the origin of the Oort Cloud?

Finally, in the framework of the Nice Model, which consequences are likely to follow from alargely cometary bombardment of the Moon and terrestrial planets during the LHB?