

## **Interstellar Meteors**

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This contribution is about the unsolved problem of the fraction of interstellar particles in the Solar System and of their detection in the Earth' atmosphere. Owing to difficulties obtaining accurate meteor measurements and, consequently, the meteoroids' orbital parameters, the identification of interstellar meteors is very challenging and has not yet provided any clear evidence of their detection. To distinguish particles of interstellar origin from local meteoroids includes, except for a detailed error examination, also an analysis of whether their orbits' hyperbolicity was not produced in the Solar System.

Based on various studies, the flux of interstellar particles depending on both their masses and their distances from the Sun is summarized as determined from dust particles measured by in situ detectors and meteors obtained from radar and optical surveys. A conclusive detection of interstellar meteoroids would be of high significance, providing unique information about the interstellar medium and the processes taking place in it, and even about the debris disks of other stars.