



## **Cometary dust composition: A tool for understanding the building blocks of comet nuclei?**

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In the past, present and future cometary dust has and will be analysed by in-situ instrumentation in the vicinity of comets. The dust originates from different locations on the surface of the nucleus and could be modified during the passage towards the observing instrument. These particles represent a constituent of the cometary material. The analysis of the chemistry and mineralogy of this cometary debris should allow setting limits on the tensile strength and morphology of the cometary grains. We will discuss various grain models based on the present knowledge and theories of cometary dust composition and the resulting microscopic and macroscopic tensile strength of cometary surface material.