

The relevance of laboratory activity in understanding the evolutionary connection between interstellar dust and primitive solar system bodies

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The VIRTIS spectrometer aboard Rosetta has shown that organics and hydroxylated Mg-rich amorphous silicates are constituents of the nucleus surface of 67P/CG. Their presence on the comet's surface suggests an evolutionary connection between dust interstellar dust and primitive objects of the solar system. This connection is indicated by experiments that mimic the evolution of dust grains (carbonaceous and silicates) as determined by their interaction with ions, atoms, and UV photons during the journey from birth locations around evolved stars to our solar system.

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Face to face

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