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Picturing the solar system small bodies with new-generation adaptive-optics systems

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Information about solar system small bodies'size, shape and surface structures is crucial to shed light on the mechanisms behind planetary accretion and evolution.

Until very recently, a detailed characterization of such properties could be obtained only for the handful of objects visited by space missions.

However, new-generation adaptive-optics instruments can open a new frontier in planetary sciences, allowing ground-based disk-resolved investigation of a much greater, statistically significant, number of small bodies. I will review the state-of-the-art of this field and discuss its perspectives, especially in view of the upcoming availability of advanced instruments of special interest for the Italian community.

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