

**The Solar Probe Plus Mission and our Understanding of the Solar Wind and Heliosphere**

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Solar Probe Plus (SPP), one of the most challenging missions to understand the origins of the Heliosphere, will carry a payload consisting of plasma and energetic particle detectors, electromagnetic field antennas and magnetometers, and a white light imager, to the unexplored regions extending from 70 to less than 9 solar radii (0.3 to 0.05 AU) from the photosphere of the Sun. Solar Probe Plus's goals are to understand the extended heating of the solar corona and acceleration of the solar wind, the origins of solar wind structures including high and low speed streams, and the origins of energetic particle acceleration in Coronal Mass Ejections and CMEs. In addition, combined measurements from the white light imager and the EM field antennas will allow the first direct measurements of dust deep in the inner solar system. This presentation will provide a broad context for the mission objectives and measurements and illustrate the likely progress SPP will bring to the understanding of the Heliosphere, stellar winds, and the fundamental physics of particle acceleration, reconnection, collisionless shocks and turbulence in space and astrophysical plasmas.