

# Dust Emission from Enceladus' South Pole: Cassini CDA Measurements and Modeling

JUERGEN SCHMIDT<sup>1</sup>, FRANK SPAHN<sup>1</sup>, SASCHA KEMPF<sup>2</sup>,  
THE CASSINI CDA-TEAM<sup>3</sup>

<sup>1</sup>*University of Potsdam, Germany*

<sup>2</sup>*MPIK Heidelberg, Germany*

<sup>3</sup>

We report on dust measurements with the Cassini Cosmic Dust Analyzer during the flyby E11 with Enceladus. The measurements indicated a strongly enhanced dust production at the satellite's south pole, where other Cassini experiments identified a region of unusually hot surface temperature. Using the data, our dynamic models of dust ejection can constrain the mass production rate and properties of the ejection mechanism.