

## **Mapping of the icy saturnian satellites: Results from the first year in Orbit**

THOMAS ROATSCH<sup>1</sup>, MARITA WAEHLISCH<sup>1</sup>, FRANK SCHOLTEN<sup>1</sup>, ANGELIKA HOFFMEISTER<sup>1</sup>, KLAUS-DIETER MATZ<sup>1</sup>, TILMANN DENK<sup>2</sup>, GERHARD NEUKUM<sup>2</sup>, PETER THOMAS<sup>3</sup>, PAUL HELFENSTEIN<sup>3</sup>, CAROLYN PORCO<sup>4</sup> and THE CASSINI-ISS TEAM

<sup>1</sup>*Institute of Planetary Research, German Aerospace Center (DLR), Berlin, Germany*

<sup>2</sup>*Sensing of the Earth and Planets, Freie Universitaet Berlin, Germany*

<sup>3</sup>*Department of Astronomy, Cornell University, Ithaca, NY*

<sup>4</sup>*Space Science Institute, Boulder, CO.*

The Cassini spacecraft started to investigate the Saturnian icy satellites in June 2004 with the flyby of Phoebe. This flyby was followed by close flybys of Dione flyby and Iapetus later in 2004 followed by two close flybys of Enceladus and more distant flybys of other icy satellites in the first half of 2005. More close flybys (e.g. Dione and Hyperion) are scheduled for the second half of this year. The images taken by the Cassini orbiter camera during these flybys together with more distant observations allow the compilation of high resolution image mosaics. These data can also be used to calculate new global mosaics (e.g. for Phoebe) or to improve the existing global mosaics based on Voyager data (e.g. for Iapetus). These global mosaics can be used both for scientific interpretation and for the planning of further flybys later in the tour. Furthermore, these global mosaics can be extended to cartographic standard products.

We will show in this presentation both examples of new mosaics and cartographic products and will demonstrate how the mosaics can be used for further planning work.