



Saturn's magnetosphere after the end of Cassini

Norbert Krupp (1), Peter Kollmann (2), Elias Roussos (1), Don Mitchell (2), William Kurth (3), Michele Dougherty (4), and Hunter Waite (5)

(1) Max-Planck-Institut für Sonnensystemforschung, Göttingen, Germany (krupp@mps.mpg.de), (2) The Johns Hopkins University Applied Physics Laboratory, Laurel, MD, USA, (3) University of Iowa, Iowa City, IA, USA, (4) Imperial College London, London, UK, (5) Southwest Research Institute, San Antonio, TX, USA

Cassini explored the Saturnian magnetosphere for more than 13 years (2004-2017) or about half a Saturn year. The spacecraft performed orbits in the equatorial plane with close flybys at Enceladus, Rhea, Dione, Tethys, and Titan but Cassini also went on high-latitude orbits and investigated regions outside the equatorial magnetodisc. The particles and field investigations onboard Cassini offered the opportunity to study the three-dimensional magnetosphere of Saturn for the first time in great detail.

In this presentation the highlights of the findings and the discoveries from Cassini in the Kronian magnetosphere will be summarized, including the results of the Grand Finale of the Cassini mission when the spacecraft explored the region between the planet and the ring system for the first time in history. It will be shown how our view of the global configuration and the temporal and seasonal variability of Saturn's plasma environment has changed after the end of the Cassini mission.