

## **Venus Express Magnetic Investigation**

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The Venus Express mission is scheduled to launch in 2005. Among the seven instrumentations onboard, it carries a magnetometer to study the Venus plasma environment. Although Venus has no intrinsic magnetic moment, the piled-up interplanetary magnetic field (IMF) forms a magnetic barrier in dayside to interact with the solar wind. In nightside, the draped IMF results in a magnetotail which is similar to the Earth's distant tail. Space Research Institute in Graz, in collaboration with IGEP of TU Braunschweig and Imperial College, is responsible for the Venus Express magnetometer. The magnetometer has been integrated to the spacecraft and has been successfully through various tests. In this paper, we describe the magnetic field experiment of the Venus Express mission. We shall report the status and performance of the instrument. We will also present what we expect from the Venus Express magnetic field investigation.