



## **ICME effects on the induced magnetospheres of Venus and Mars**

Andrea Opitz (1,2), Daniel Vech (2), Eduardo Sanchez-Diaz (1,3), Olivier Witasse (1), Karoly Szego (2), and Hermann Opgenoorth (4)

(1) European Space Agency / ESTEC, Science and Robotic Exploration Department, Noordwijk ZH, Netherlands (andrea.opitz@esa.int), (2) Wigner RCP, Space Department, Budapest, Hungary, (3) IRAP (CNRS-UPS), University of Toulouse, Toulouse, France, (4) Swedish Institute of Space Physics, Uppsala, Sweden

We study in detail the effects of interplanetary coronal mass ejections on the induced magnetosphere of Venus and Mars. The results for the two planets will be compared in this paper, the similarities and the differences between the plasma processes at Venus and Mars will be discussed. These are unmagnetized planets with ionosphere that interacts directly with the solar wind. This interaction creates their induced magnetosphere that is highly dependent on the solar wind variations. We aim to differentiate the effects of the ICME shock front, its sheath and the magnetic cloud. The characteristics of the ICME structures are different at the two planets due to their different heliocentric radial distance, hence their effects on the planetary plasma environment are expected to be different as well.