

# **A field and wave instrument package for MOPS**

**L. G. Blomberg** (1), J.-E. Wahlund (2), N. Ivchenko (1), G. T. Marklund (1), J. A. Cumnock (1), M. André (2), S. Barabash (3)

(1) Department of Space and Plasma Physics, Royal Institute of Technology, Stockholm, (2) Swedish Institute of Space Physics, Uppsala, (3) Swedish Institute of Space Physics, Kiruna

MOPS (Mars Orbiting Plasma Surveyor) is a proposed microsatellite for studying the upper atmosphere and plasma environment of Mars. Scientific objectives include characterization of the atmospheric escape mechanisms, upstream waves, the physics of the ionopause, the structure of the induced magnetosphere and of magnetic anomalies, as well as possible aurora-like emissions. We focus here on the characteristics and capabilities of the field and wave instruments that include a two-axis double probe electric field detector, a flux-gate magnetometer, and three Langmuir probes.