

POSTDOCTORAL FELLOWSHIP IN SPACE PHYSICS

Postdoctoral Fellowship in Space Physics connected to the Cassini/Huygens project at the Swedish Institute of Space Physics, Uppsala, Sweden

Applications are invited for a postdoctoral fellowship for studies of the magnetosphere of Saturn and/or the ionosphere of Titan using foremost data from the Radio & Plasma Wave Science (RPWS) instruments onboard the Cassini orbiter. The emphasis of the project will be on cold (<20 eV) plasma processes, low frequency (< 7 kHz) plasma wave processes or a combination thereof.

The goal of the project is to investigate how energy transport, dynamics and chemistry works in the inner magnetosphere of Saturn including the dusty ring plasma, and how these factors play a role when the Kronian magnetosphere (and sometimes the solar wind) interact with the ionosphere of Titan or the space environment around some of the larger icy moons. We partly focus on how microphysical plasma processes affects these larger scale processes.

Our group has Co-investigator responsibilities within RPWS on the Cassini spacecraft, where we have contributed the Langmuir probe system. We work mostly with data from the RPWS Langmuir probe as well as the electric/magnetic waveform receivers below 7 kHz. Data from other instruments are available on case-to-case basis from PI instrument teams.

The successful candidate will be involved in extensive international collaboration and interpretation of data. Experience in combining advanced analysis with theoretical modelling is an advantage. Interest and experience in development of instrumental techniques and methods will be likewise positively valued, and so will experience in co-ordination of scientific activities.

Candidates should have completed a PhD within the last 3 years.

The position is available at the Swedish Institute of Space Physics, located at the Ångström Laboratory in Uppsala, Sweden, from the first half of 2005 for one year, with the possible extension for an additional year. The Swedish National Space Board (SNSB) funds the position. Closing date is March 15, 2005. Applications should include CV, a short letter stating the applicants research interests and relevant experience, copies of undergraduate and PhD degree certificates, names of contact information from two professional references, and reprints of up to 4 selected publications.

Applications should be sent to Jan-Erik Wahlund (jwe@irfu.se, Tel. +46-18-4715946) at the Swedish Institute of Space Physics, Uppsala, Box 537, SE-751 21 Uppsala, Sweden.

Further information on space physics research in Uppsala can be found at <http://www.irfu.se>