



## PhD Student Position in Space Physics

### PhD student position in Space Physics related to “Production of pre-biotic molecules in the atmosphere of Titan and early Earth” at the Swedish Institute of Space Physics, Uppsala, Sweden

Applications are invited for a PhD student position to study the total production rate and type of complex organic molecular ions in Titan’s ionosphere based on the latest scientific data, and use this knowledge to infer the possible production rate of similar molecules in early Earth’s atmosphere. The new PhD student will work directly with experimental data from the international NASA/ESA mission Cassini now operating around Saturn. He/she will also interact with molecular-physics specialists at the University of Stockholm. The new PhD student is also expected to collaborate actively with several international experimental and theoretical groups involved in the Cassini project.

The Space Plasma Physics Research Programme at the Swedish Institute of Space Physics has contributed the Langmuir probe system to the Radio and Plasma Wave Science (RPWS) instrument package on Cassini. We work with data from all sensors from RPWS as well as with data from other instruments on Cassini.

The position is available at the Swedish Institute of Space Physics, located at the Ångström Laboratory in Uppsala, Sweden, starting at the latest the second half of 2012 for a total duration of four years. The PhD student will be enrolled in the PhD program at Uppsala University and will formally belong to the Department of Physics and Astronomy at Uppsala University. The Swedish National Space Board (SNSB) funds the position.

Jan-Erik Wahlund at the Swedish Institute of Space Physics (IRF), Uppsala, will be the supervisor of the PhD student. Ass. Prof. Wolf Dietrich Geppert at Molecular Physics Division, University of Stockholm will be an assistant supervisor. Further information on research at the two host departments can be found at <http://www.irfu.se>, and [http://astrobiology.physto.se/people/faculty/wolf\\_geppert.html](http://astrobiology.physto.se/people/faculty/wolf_geppert.html).

The successful candidate should preferably have a background in electromagnetism, plasma physics, space physics, molecular physics and/or aeronomy. The candidate should have completed his/her physics education at MSc level within the last 2 years.

Closing date is **March 15, 2012**. Applications should include a CV, a statement of the applicant’s relevant experience and copies of undergraduate degree certificates. If available, the applicant’s MSc thesis work should be included.

Applications shall be sent to: Registrator, Swedish Institute of Space Physics, Box 812, SE-981 28 Kiruna, Sweden or by email to: [registrator@irf.se](mailto:registrator@irf.se) (Tel. +46 980 79061).