PhD student position in space plasma applied to ROSETTA at LPC2E, CNRS Université d'Orléans, France

The PhD research will focus on the characterisation of the structure, the dynamics and the evolution of the ionised environment of a comet, as well as its interaction with the Sun, in the context of the ROSETTA mission. Rosetta is an exploratory space mission of the European Space Agency (ESA) that arrived in the vicinity of its target comet 67P/Churyumov-Gerasimenko in summer 2014. It is the first mission designed to orbit and escort a comet. On board the Rosetta orbiter, the Rosetta Plasma Consortium is a suit of plasma sensors designed to monitor in situ the ionised environment of the comet. Among them, the Mutual Impedance Probe, under the technical and scientific responsibility of LPC2E, is designed to measure the electron density and temperature, as well as the electric activity in the cometary environment. The PhD student will participate in the data analysis and interpretation of the Mutual Impedance Probe, in interaction with scientists working with the other instruments of the Rosetta Plasma Consortium.

Candidates are required to have a Master's degree in Physics or an equivalent degree. A specialization in astrophysics or plasma physics may be helpful but is not a requirement. Analysis of data is an essential part of the work, good skills in programming and experience with using idl/Matlab and Fortran 95 (or equivalent) are required, as well as good communication skills in written and spoken English.

Applications must be sent before 30 April 2015 to pierre.henri_at_cnrs-orleans.fr and should include:

- 1. a cover letter summarizing your qualifications, your scientific interests, and your motivation for applying,
- 2. a curriculum vita (CV),
- 3. copies of degree certificates,
- 4. a list of MSc courses with grades,
- 5. relevant publications (including master thesis), if any,
- 6. names and contact information of 3 references.

Short-listed candidates will be interviewed in mid-May. The position is planned to start between September and December 2015. The student will be employed for 3 years at Université d'Orléans and work at LPC2E on the CNRS campus (Orléans, France), supervised by Dr. P. Henri and Dr. V. Krasnoselskikh. The monthy net salary is 1367 EUR (about 1684 EUR monthly gross salary) without teaching activity, or 1643 EUR (about 2024 EUR monthly gross salary) when combining a teaching activity to the research activity.