

## **Post-doctoral position in the study of Star Formation with Herschel (Laboratoire d'Astrophysique de Bordeaux)**

A post doctoral position is available in the «Star Formation» group at the Laboratoire d'Astrophysique de Bordeaux (LAB, OASU, Bordeaux), in the framework of the group activities for the Herschel mission. This fellowship is funded by the Université Bordeaux 1.

The LAB is an astronomy institute located in the suburbs of Bordeaux, in the south-west of France (3 hrs from Paris by fast train). In addition to research activities in star formation, interstellar medium, proto-planetary disk, astrometry and planetology (including exoplanets and exobiology), the Institute participates in the technical development and commissioning of major systems in space projects (Herschel) and in the large ground-based project ALMA. Recently, together with the CESR/Toulouse, the LAB has developed and produced the high resolution spectrometer (HRS) of HIFI aboard Herschel. The "star formation" group has a long experience in the interstellar medium studies both in our Galaxy and in nearby galaxies, with a strong experience in radio/mm techniques and observations mostly of spectral lines. Following the Herschel developments, the group participates in several key programs on Herschel, and is leading the sub-program WISH (Water In Star forming regions with Herschel, <http://www.strw.leidenuniv.nl/WISH/>) on IR-quiet massive protostars (Herpin et al.).

The applicant is expected to participate in the exploitation of this sub-program on massive protostars. Some preparatory works toward the targeted sources (IRAM 30m telescope observations, and modeling) which are in progress will also be part of the proposed work. In addition the candidate will develop analytic and theoretical skills toward the interpretation of the data. The project is also supported by the ANR (Agence Nationale de la Recherche) research program PROBeS (<http://www.obs.u-bordeaux1.fr/radio/SBontemps/probes/>).

The position is available for an initial period of one year (to begin before end of 2009), and will most certainly be extended to a second year starting before the end of 2009. Applications will be considered starting June 15<sup>th</sup> until the position has been filled.

The gross (net) yearly salary will be 30200 (24700) euros. Applicants should have a PhD degree and a strong background in star formation and interstellar medium science. Experience in spatial missions, submillimeter observations, and radiative transfert codes applied to molecular lines will be an asset.

The applicants should send (by mail) a Curriculum Vitae, a statement of research interests and a list of publications. They should also arrange for three letters of references to be sent independently at the address below:

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The deadline for submission of applications is May 1st 2009. Candidate could be invited to have an interview on their activity.