



## PhD POSITION IN ICECUBE AT ULB, BRUSSELS - BELGIUM

**The Service de Physique des Particules Élémentaires of the Université Libre de Bruxelles - ULB invites applications for a PhD position within the IceCube collaboration.**

The Service is part of the Inter-University Institute for High Energies **IIHE (ULB-VUB)**, which combines the experimental particle and astro-particle research groups from both Brussels universities: ULB and VUB. Currently the IIHE has more than 80 physicists, engineers and support staff and is involved in research in large international collaborations on several domains like particle physics with **CMS** at the LHC, neutrino physics with **JUNO** and **SoLid**, and astroparticle physics with the **IceCube**, and **Auger** experiments. In addition it has a strong **R&D division** based on detector development, data acquisition systems, and electronics.

The neutrino astro-particle division seeks a PhD student who will engage in analysis of data from the **IceCube detector** (<http://icecube.wisc.edu/>). The Brussels group is active in searches for point sources, dark matter, and development of new detector technologies for future, larger-scale observatories.

The PhD position is supported by the ARC grant (*Actions de Recherche Concertée*) from the Fédération Wallonie-Bruxelles, titled “**Searches for a dark matter emitted neutrino signal**”. Outstanding candidates will join the activities of the Brussels IceCube analyzing the data of the telescope to search for dark matter signatures using both the spatial and energy information. The candidate will also collaborate closely with the department of theoretical physics with long phenomenological experience in dark matter. The position does not impose teaching duties, but contributions to teaching are welcome. The salary is competitive and includes all social security benefits (information is available on request). Training is provided in an international context; the doctoral studies can also take place in a context of inter-university co-supervision, with a joint/double doctoral degree by ULB and the former home institute. The thesis may be written in either French or English.

The positions will remain open until suitable candidates are found. Interested candidates are encouraged to **apply before October 10th, 2017**, when a first application screening will take place. Applications should be sent by email (with subject “IceCube –PhD position”) to **J. A. Aguilar** via the IIHE-ULB secretariat (**Audrey.Terrier@ulb.ac.be**). They should include a detailed CV, including a scanned copy of the diploma, a letter of motivation and the names of 2-3 referees; the list of attended courses at Master level, corresponding marks and ranking among students of the same class should also be provided.

**Contact : J. A. Aguilar** - via the IIHE secretary : **Audrey.Terrier@ulb.ac.be**

**Phone :** +32-2-629.3202

**IIHE web site :** <http://w3.iihe.ac.be>