

In the framework of the EU-funded **ERC project ULTIMATE**, the **Astroparticle Physics Group** at the Physics Institute of the University of Freiburg invites applications for a

PhD Position in experimental Astroparticle Physics (LXe-based Dark Matter Search)

The successful candidate will be a member of the recently started ERC project ULTIMATE, which explores possible new paths towards the ultimate dark matter detector. Such a detector, capable to measure a dark matter signal above the background "floor" from irreducible neutrino interactions, could be realized in the framework of the international DARWIN project. The candidate will work in a dedicated team to address fundamental technological aspects of such future detector in experimental R&D projects conducted in Freiburg.

The astroparticle group at the University of Freiburg is involved in the direct detection of dark matter using liquid-xenon based time projection chambers (XENON, DARWIN), mainly focusing on detector design, data acquisition and electronics, low-background techniques and data analysis. Other ongoing projects of the group are CAST and COMPASS at CERN.

Applicants should have a Master's degree (or equivalent) in physics and knowledge in particle/astroparticle/nuclear physics. Basic programming skills are required. Laboratory skills are an asset.

Interested candidates are encouraged to send a motivation letter stating their research interests, a CV with a list of publications (if available), an abstract of the masters/diploma thesis (max ½ page), degree certificates and study transcripts with a description of the grading scheme, a tangible proof of the fluency in English (if available) as well as names and email addresses of two potential references to the address given on the right. Please send applications in electronic form (one single pdf file).

The position is open November $\mathbf{1}^{st}$, 2017 until filled. Applications are reviewed in the order they are received.

Albert-Ludwigs-Universität Freiburg

Physikalisches Institut



Experimental Astroparticle Physics (APP)

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