

PhD position in Direct Dark Matter Search with Liquid Argon Detectors

The Dark Matter research group (CIEMAT-DM) of the CIEMAT-FP Unit (*Centre for Research in Energy, Environment and Technology* in Madrid, Spain) announces the upcoming opening of a predoctoral position for outstanding young Msc graduates interested in working in direct Dark Matter search activities towards a PhD Thesis.

The 4-year PhD contract is funded by CIEMAT. The official call will be announced in the webpage <http://www.ciemat.es/portal.do?IDM=254&NM=2> in the upcoming weeks (end of October). It will also be announced at <http://cfp.ciemat.es/predoc>, <http://darkmatter.ciemat.es/predoc> and in social networks.

The candidate must have a Master Degree in Physics (according to the Bologna Declaration). The main considerations for selection are high motivation, excellent grades, fluency in English, and strong interest in data analysis and hardware development for experimental particle physics. Experience in programming and scripting languages will be valued.

The CIEMAT-DM group participates in the ArDM experiment in the Canfranc Underground Laboratory (LSC, Spain), in DEAP-3600 (SNOLAB, Canada) and in the DarkSide-20k experiment to be installed in the Gran Sasso National Laboratory (LNGS, L'Aquila, Italy). ArDM and DEAP are the first tonne scale liquid argon (LAr) detectors and are currently taking data. DarkSide-20k is a 20 tonne LAr time projection chamber, currently in design and prototyping phase, and construction will start soon. Operation is expected to start in 2022. The PhD student is expected to work in the analysis of physics data, as well as in the development of innovative hardware, detector simulation and analysis software for current and future LAr detectors.

We offer close supervision within a very active research group, working in an international environment. The selected student is expected to spend part of his/her time at LSC, LNGS, and other collaborating institutes worldwide.

For any question, please contact: darkmatter@ciemat.es

The CIEMAT Particle Physics Unit of Excellence is an affirmative action/equal opportunity employer. Eliminating gender inequalities by promoting equal opportunities for men and women is a core compromise of our group and it is our commitment to establish the necessary actions to close the gender gap.