



VNIVERSITAT
ID VALÈNCIA



Ph.D. position in Astroparticle Physics with Machine Learning

The Institute of Corpuscular Physics (IFIC), joint institution of the Spanish Research Council (CSIC) and the University of Valencia, Spain, invites applications from national and international students for a Ph.D. position, in the interface between Astroparticle Physics and Machine Learning (ML). Emphasis will be a priori given on the potential improvements on current Dark Matter searches driven by the use of state-of-the-art ML techniques. The successful applicant will pursue a Ph.D. degree in Theoretical Physics to be awarded by the University of Valencia.

Publication date of the call: Feb 5th, 2021

Closing date of the call: April 30st, 2021

Starting date of the contract: flexible, from September 1st, 2021 to January 1st, 2022.

Features: The position is funded via the “GenT Excellence Program” by the regional government (Generalitat Valenciana), associated to the project “Novel methods in Dark Matter searches driven by Artificial Intelligence” (PI: Bryan Zaldivar). The Ph.D. candidate will join IFIC, in Valencia, one of the largest and most active institutes in Europe for research in particle physics (it participates, for example, as a node in the European ITN project “HIDDeN”).

The duration of the contract is 3+1 years. Travel funds will be available in order for the Ph.D. student to go to International Schools to improve her/his expertise in the field, as well as to workshops and conferences to present her/his work. Collaboration and research stays in other well-known international groups are also envisaged.

Requirements: Candidates must have a Masters (or equivalent) degree by the date of start of the Ph.D. contract. Candidates having background in physics, statistics and numerical programming will be given preference. Female students are under-represented in STEM, and are encouraged to apply.

Applications: Applications should include: 1) Motivation letter, 2) CV, 3) academic transcripts of Bachelor’s and Master’s courses with grades, and 4) a reference letter from one senior researcher or teacher. This documentation should be sent to b.zaldivar.m@csic.es before the deadline (the reference letter should be sent separately by the senior colleague).

Further information: Do not hesitate to contact Bryan Zaldivar via the above email for more information.

