POSTDOCTORAL SCHOLAR - EXPERIMENTAL HIGH ENERGY PHYSICS

The experimental high energy physics group at the University of California, Davis invites applications for postdoctoral research on the DarkSide-20k, DarkSide-LowMass and ARGO Experiments.

The Global Argon Dark Matter Collaboration (GADMC) includes scientists from all the major groups currently working with the liquid argon technology (DarkSide, DEAP-3600, MiniCLEAN, and ArDM) to push the sensitivity for WIMP dark matter detection several orders of magnitude beyond current levels. The DarkSide-20k two-phase detector, currently in construction at the Gran Sasso Laboratory (LNGS), aims at a total exposure of 200 ton-year. The DarkSide-LowMass detector, to be installed at LNGS, will be optimized for the observation of the ultra-low energy ionization-only events. The collaboration is also pursuing design studies for the ARGO detector with a 300-ton fiducial mass that would extend the sensitivity to the neutrino floor region for high mass dark matter detection.

The primary responsibility of this position is to participate in the construction and on-site commissioning of the prototype, DarkSide-LowMass and DarkSide-20k detectors as well as to prepare for analysis. The position will be based at CERN, LNGS and UC Davis. The successful candidate will take an active role in the development of simulation and analysis tools and will have the opportunity to play a leading role in the ongoing R&D projects towards precise calibration of dark matter and neutrino liquid argon detectors.

Candidates must have completed a Ph.D. in experimental particle or nuclear physics or related fields. The position is available immediately. The initial term is two years and may be extended if mutually agreed. Please submit your application, including a statement of research and a CV with the list of publications, and arrange to have 3 reference letters sent. The position will remain open until filled.

Application website is https://recruit.ucdavis.edu/JPF02715. Application assistance: Emilija Pantic <u>pantic@ucdavis.edu</u>

To ensure full consideration, apply by 15 April 2019. Position will remain open until filled.

Applicants from underrepresented groups are encouraged to apply. The University of California is an Equal Opportunity/Affirmative Action Employer.