

# Postdoctoral Position in Experimental Dark Matter and Neutrino Physics at UC Davis

The Neutrino and Dark Matter group at the University of California, Davis invites applications for postdoctoral research on the DarkSide-20k experiment and related detector development.

The Global Argon Dark Matter Collaboration (GADMC) includes scientists from all the major groups currently working with the liquid argon technology 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 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 development, construction and on-site commissioning of the DarkSide-20k detector. The position will be based at UC Davis, CERN, and LNGS. The successful candidate will also 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. The UC Davis Neutrino and Dark Matter Group currently consists of four professors, four postdocs, and nine graduate students. In addition to DarkSide we are involved in LUX/LZ, DUNE, ANNIE and Theia.

Candidates must have completed a Ph.D. in experimental particle or nuclear physics or related fields. Software experience from physics analysis, simulations and signal processing is a plus, as is experience with detector development. The position is available immediately. To ensure full consideration, apply by 30 September 2020. Position will remain open until filled.

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 to [pantic@ucdavis.edu](mailto:pantic@ucdavis.edu)

Application website is: <https://recruit.ucdavis.edu/JPF03661>

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

## Document Requirements

- Curriculum Vitae - Your most recently updated C.V., including a list of publications
- Statement of Research
- Cover Letter
- Statement of Contributions to Diversity - Diversity contributions documented in the application file will be used to evaluate applicants. Visit [http://academicaffairs.ucdavis.edu/diversity/equity\\_inclusion/index.html](http://academicaffairs.ucdavis.edu/diversity/equity_inclusion/index.html) for guidelines about writing a diversity statement and why one is requested.

## Reference Requirements

- 3 letters of reference required

## HOW TO APPLY

1. Create an ApplicantID
2. Provide required information and documents
3. If any, provide required reference information

## Contact:

- Pantic, Emilija ([pantic@ucdavis.edu](mailto:pantic@ucdavis.edu))

## Letters of Reference should be sent to:

- [pantic@ucdavis.edu](mailto:pantic@ucdavis.edu)