

**POSTDOCTORAL RESEARCHER
LUX / LZ DARK MATTER SEARCHES
CASE WESTERN RESERVE UNIVERSITY**

The Dark Matter Group at Case Western, led by Professors Tom Shutt and Dan Akerib, has an opening for a postdoctoral position in the LUX and LZ dark matter program.

The LUX (Large Underground Xenon) experiment is about to begin searching for dark matter at the newly commissioned Davis Campus at a depth of 4850' in the Sanford Underground Research Facility, the site of the former Homestake Goldmine. The LUX detector is a 2-phase xenon time projection chamber with 300 kilograms of active xenon. The low radioactivity, background discrimination and position reconstruction of the detector will allow for unprecedented sensitivity in the search for Weakly Interactive Massive Particles that are hypothesized to make up cosmological dark matter. The experiment is just entering its science operations phase and is expected to acquire data for the next couple of years. The successful candidate will be expected to play a significant role in data analysis, presentation of results and preparation of scientific publications.

In addition to carrying out the LUX experiment, we are part of the LZ collaboration, which is a merger of the LUX and Zeplin-3 collaborations. The collaboration, with Prof. Shutt as Spokesperson, is carrying out R&D and design work aimed at a multi-ton follow up experiment to be housed in the Davis cavern after the completion of LUX.

Interested applicants are asked to send an electronic application in PDF format to LUXLZ_postdoc@phys.cwru.edu. Applications should include a curriculum vitae, list of publications and the names of at least three references. The applicant should arrange for letters of reference to be emailed directly to the above address. **To receive full consideration, completed application including reference letters should be received by May 15, 2013**, although applications will be considered until the position is filled.

Preference will be given to applicants with strong backgrounds in data analysis, detector operations and detector development. Qualifications include a Ph.D. in physics or a closely related field. Position includes health insurance. In employment, as in education, Case Western Reserve University is committed to Equal Opportunity and Diversity. Case is a recipient of a National Science Foundation ADVANCE Institutional Transformation Grant to increase the participation of women in Science and Engineering.