



UNIVERSITY OF CALIFORNIA
SANTA CRUZ

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SCIPP
Postdoctoral Fellow in Instrumentation

DESCRIPTION

The Santa Cruz Institute for Particle Physics (scipp.ucsc.edu) at the University of California, Santa Cruz (UCSC) invites applications for the Postdoctoral Fellow in Instrumentation, under the direction of Professor Bruce Schumm. The postdoctoral fellow will participate in the development of ultrafast solid-state sensor detection systems geared towards applications in the fields of accelerator physics, particle physics and photon science. In collaboration with colleagues at SCIPP as well as at UC Davis, UC Santa Barbara, and the Los Alamos and Lawrence Berkeley National Laboratories, the candidate will collaborate in the design and characterization of fast solid-state detectors making use of both silicon and diamond substrates. Initial applications will be geared towards diagnostics for both upgraded existing and envisioned next-generation accelerator facilities. Activities will include sensor design and optimization through TCAD simulation, electronics and readout development, and both laboratory-bench and test-beam based characterization. Experience in these areas, while not an outright requirement for the position, will be considered as an indication of qualification for the position.

Applicants with expertise in TCAD-level device simulation and test-beam based sensor characterization are strongly encouraged to apply.

ACADEMIC TITLE

Postdoctoral Scholar

SALARY

Commensurate with qualifications and experience. Minimum annual salary rates are made based on the individual's *Experience Level*, which is determined by the number of months of postdoctoral service at any institution. See current salary scale for Postdoctoral Titles at <https://apo.ucsc.edu/compensation/salary-scales/index.html>

BASIC QUALIFICATIONS

Ph.D. (or equivalent foreign degree) in physics (including accelerator physics), materials science, electrical engineering or fields related to the development of advanced instrumentation.

POSITION AVAILABLE

March 1, 2020, contingent upon the receipt of expected funding.

MAXIMUM DURATION OF SERVICE IN A POSTDOCTORAL TITLE

Postdoctoral Scholar appointments are full-time; the initial appointment is for a minimum of one year, with the possibility of reappointment. Reappointment will be contingent upon positive performance review and availability of funding. The total duration of an individual's postdoctoral service may not exceed five years, including postdoctoral service at any institution. Under limited circumstances, an exception to this limit may be considered, not to exceed a sixth year.

APPLICATION PROCEDURES

Application materials should be submitted electronically to Professor Bruce Schumm at baschumm@ucsc.edu.

Documents/Materials

- Letter of application that briefly summarizes your qualifications and interest in the position (required)
- Curriculum vitae (required)

- List of publications, if any
- Diversity statement that addresses past or potential contributions to diversity, equity, and inclusion (optional)
[See UCSC guidelines for statements](<https://apo.ucsc.edu/diversity.html>)

Reference Requirement

Applications must include confidential letters of recommendation* (a minimum of 3 are required and a maximum of 5 will be accepted). Please have your references submit their confidential letters directly to Bruce Schumm at baschumm@ucsc.edu.

*All letters will be treated as confidential per University of California policy and California state law. For any reference letter provided via a third party (i.e., dossier service, career center), direct the author to UCSC's confidentiality statement at <http://apo.ucsc.edu/confstm.htm>.

RECRUITMENT PERIOD

Full consideration will be given to any applications completed and submitted before the position has been filled.

Postdoc. Fellow