

The Department of Physics at the Southern Methodist University invites applications for two electronics Research Associate positions to work on the upgrade projects in ATLAS and CMS for the HL-LHC.

The SMU group is involved in the electronics projects for the ATLAS Liquid Argon (LAr) readout, the ITK-Pixel readout, and the CMS Endcap Timing Layer (ETL) detector readout. In LAr the project is to develop the optical links (both for data and for control/configuration/monitoring) on the new Frontend Board (FEB2). In ITK-Pixel the project is to develop and test the cable receiver ASIC, GBCR, that restores (equalizes and re-times) the 1.28 Gbps signal from RD53B, at the end of meters of electric transmission media and before the lpGBT ASIC on the Opto-board. In CMS the project is to develop and test the ETROC ASIC that reads out the LGAD sensors in ETL.

The successful candidates will be expected to play leading roles in these hardware projects for the HL-LHC. Qualified candidates must have experience of electronics work for particle physics. This includes PCB level circuit design and debug, basic FPGA coding, data acquisition software and data analysis. Salary will be commensurate with experience and qualifications.

The application material will consist of a curriculum vitae and three names of referees. The applications should be sent to Ms. Michele Hill at [jobsearch@physics.smu.edu](mailto:jobsearch@physics.smu.edu). Further information can be obtained by contacting Prof. Jingbo Ye at [yejb@physics.smu.edu](mailto:yejb@physics.smu.edu). Applications received before August 1, 2022 will receive full consideration. Review of applications will continue until the positions are filled. The positions and their durations are contingent to the funding situations.

SMU will not discriminate in any program or activity on the basis of race, color, religion, national origin, sex, age, disability, genetic information, veteran status, sexual orientation or gender identity or expression. The Executive Director for Access and Equity/Title IX Coordinate is designated to handle inquiries regarding nondiscrimination policies and may be reached at the Perkins Administration Building, Room 204, 6245 Boaz Lane, Dallas, TX 75205 214-768-3601, [accessequity@smu.edu](mailto:accessequity@smu.edu). Hiring is contingent upon the satisfactory completion of a background check.