

Project Description - Silicon Tracker Module and DAQ Development

The APV25 readout ASIC, developed for the CMS silicon tracker and used in a number of other experiments, has been chosen as the readout technology for the HPS tracking and vertexing system. SLAC is currently commissioning the prototype DAQ for the HPS Test Run, to occur next Spring, using CMS silicon modules. Within the next several weeks, we will also be prototyping the first silicon modules for HPS and beginning to exercise them with the rest of the DAQ for the test run. There are a large number of projects for students, from helping assemble prototype modules in the cleanroom, to debugging the DAQ, to testing HPS modules in order to benchmark and optimize their performance for the test run.

For an interested student with the required skills, participation in these projects has the potential to evolve into collaboration in the HPS Test Run.

Please contact [Tim Nelson](#) for more information regarding this project.