Research Scientist of Physics and Astronomy- Experimental High-Energy Physics

The experimental high-energy physics (HEP) group at the University of Oklahoma (OU) invites applications for a Dodge Family Research Scientist position in experimental particle physics. The HEP group at OU currently does research at the Large Hadron Collider with the ATLAS collaboration, and currently consists of four PIs and 12 additional members (research faculty, postdocs and graduate students), and contributes to all areas of the ATLAS project (physics analysis, combined performance work, operation, phase II upgrade and computing).

The physics analysis activities of the group are currently focused on studies of the Higgs boson and top quark, as well as searches for extended Higgs sectors and exotic new physics. The group has extensive experience in silicon strip and pixel detector technology and is participating in the Phase II upgrade of the ATLAS Inner Tracker (ITk) detector. The HEP group operates a class 1000 clean room and has access to the departmental instrument shop and electronics lab. In addition, OU hosts one of the ATLAS tier 2 computing centers in the US.

The Dodge Family Research Scientist is a full-time research position. The initial term is for 5 years, with the expected permanent renewal thereafter (subject to satisfactory progress and pending annual performance reviews and funding availability. This position is supported by an endowment). The successful candidate is expected to develop research initiatives that will expand and enhance the scope of the physics program at OU, including taking leadership positions within broad areas such as current and future hardware efforts, object reconstruction, or artificial intelligence and machine learning applications in experimental HEP. The candidate will likely contribute to the HEP effort on ATLAS working with the four current PIs, but other research interests will be considered for exceptional candidates.

Qualified applicants in all areas of experimental high-energy physics are encouraged to apply. Applicants must have a Ph.D. in Physics or a related area and at least two years of postdoctoral research experience. Expertise in the candidate's area of interest, such as hardware contributions or computer applications is expected.

Application Instructions:

Applicants must apply for this position online at https://jobs.ou.edu , job requisition 164970 or use the quick link (http://apply.interfolio.com/164970). Applications should include:

- a curriculum vitae

• a list of publications
• a description of past research and future research plans (3-5 pages)
• a cover letter (3 pages max). The cover letter, indicating a potential start date, may also address examples of the candidate's research, graduate student mentorship, and ability to attract funding.
• contact information for 3 professional reference letters at the time of application

Contact Person and Application Review Date:

Applications received by April 1, 2025 will receive full consideration. Review of applications will continue until the position is filled. The start date for the appointment is flexible, with appointments starting as early as May 5, 2025. The position will be based in Norman, Oklahoma.

Inquiries should be directed to the search committee chair:
Prof Brad Abbott
Professor of Physics and Astronomy
University of Oklahoma
abbott@ou.edu