

# **Job Title: Associate or Full Professor of Quantum Information Science**

## **Job Summary**

The Departments of Physics & Astronomy, Chemistry, Computer Science, and Mathematics in the College of Science at Purdue University invite applications for multiple faculty positions in Quantum Information Science (QIS) to begin August 2023. These positions will be associate/full professor level appointments. When appropriate, successful candidates may be considered for joint appointments across the College.

Quantum Information Science is at the frontier of several traditional research disciplines including condensed matter physics, atomic, molecular, and optical physics, information theory, pure and applied mathematics, computer science, and chemistry. QIS strives to harness the defining quantum mechanical properties of superposition and entanglement to provide breakthrough advances for computing, secure communications, and novel device functionalities. As such, our QIS initiative is part of a large-scale interdisciplinary hiring effort across key strategic areas in the departments of Physics and Astronomy, Chemistry, Computer Science, and Mathematics.

The College of Science is Purdue's second-largest college, comprising the physical, computing, and life sciences. These new faculty positions come at a time when the College leadership has committed to significant investment in QIS. The College of Science is especially seeking to enhance our existing strengths in research at the interface of Chemistry and Physics in tandem with Computer Science and Mathematics through strategic hiring of creative scientists to be part of the cutting-edge interdisciplinary environment at Purdue University.

## **Target Areas**

Successful candidates will display potential to build a comprehensive program in one of the following areas: experimental or theoretical quantum computing, novel experimental probes of quantum matter, synthesis of quantum materials, quantum sensing, or quantum communication. Candidates with expertise in quantum and quantum-inspired algorithms, optimization of quantum/classical compute resources, quantum topology, quantum algebra, and applied mathematics are encouraged to apply.

## **Qualifications**

Candidates must have a PhD in physics, chemistry, computer science, mathematics or other closely related field, with outstanding credentials that demonstrate potential to develop a vibrant independent research program, as well as a strong commitment to excellence in teaching. Successful candidates are expected to develop a vital and sustainable research program supported by extramural funding and teach courses at the undergraduate and/or graduate level.

## **The Departments and College**

The College of Science and its departments have launched initiatives in new emerging areas, and committed the resources necessary to make the new growth impactful. Under the QIS initiative, 12 new faculty members have been hired within the College of Science in the past 3 years. To learn more please visit our departmental websites: <https://www.physics.purdue.edu>, <https://www.chem.purdue.edu>, <https://www.math.pur>

[due.edu, https://www.cs.purdue.edu](https://www.cs.purdue.edu). Purdue itself is one of the nation's leading land-grant universities, with an enrollment of over 49,000 students primarily focused on STEM subjects. For more information, see <https://www.purdue.edu/purduemoves/initiatives/stem/index.php>.

## **Application Procedure**

Applications need to be submitted to:

<https://careers.purdue.edu/job-invite/22261/>

and must include (1) a complete curriculum vitae, (2) a list of publications, (3) a statement of present and future research plans (4-page limit), and (4) a statement of teaching philosophy. In addition, candidates should arrange for at least 3 letters of reference to be sent to [qissearch@purdue.edu](mailto:qissearch@purdue.edu). Questions regarding the positions and search may also be directed to [qissearch@purdue.edu](mailto:qissearch@purdue.edu).

Applications completed by December 31st, 2022 will be given full consideration, although the search will continue until the position is filled. A background check is required for employment in this position.

*Purdue University, the College of Science, and the Departments of Physics and Astronomy, Chemistry, Mathematics, and Computer Science are committed to advancing diversity in all areas of faculty effort, including discovery, instruction, and engagement. Candidates are encouraged to address in their cover letter how they are prepared to contribute to a climate that values diversity and inclusion. Purdue University, the College of Science, and its Departments are committed to free and open inquiry in all matters. Candidates are encouraged to address in their cover letter how they are prepared to contribute to a climate that values free inquiry and academic freedom.*

***Purdue University is an EEO/AA employer. All individuals, including minorities, women, individuals with disabilities, and veterans are encouraged to apply.***