

Theory Postdoctoral Fellows Center for Quantum Information and Control (CQuIC)

cquic.unm.edu

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The Center for Quantum Information and Control (CQuIC) is a research center headquartered at the University of New Mexico (UNM), with a node at the University of Arizona (UA), and an NSF-funded Focused Research Hub in Theoretical Physics (FRHTP). CQuIC is seeking to hire up to four theory postdoctoral fellows at UNM, with flexible start dates over the next year.

The core faculty at CQuIC are F. Elohim Becerra, Carlton Caves (Director), Ivan Deutsch, Poul Jessen (UA), and Akimasa Miyake; these are the Project Directors (PDs) for the FRHTP. There are ten Senior Collaborating Participants (SCPs) associated with the FRHTP, all at other institutions: Howard Barnum, Grant Biedermann, Robin Blume-Kohout, Gavin Brennen, Joshua Combes, Yuan-Yu Jau, Andrew Landahl, Gerard Milburn, Timothy Ralph, and Rolando Somma.

Theoretical research at CQuIC is focused on (i) foundational investigations in quantum information, control, and measurement; (ii) quantum control of qudit systems; (iii) quantum control and squeezing of collective atomic spins; (iv) analog quantum computation and simulation. Theoretical research ranges from abstract topics in quantum information theory to detailed modeling and protocol design for experiments involving cold atoms and/or quantum-optical systems. Successful applicants will have the opportunity to work with the PDs and SCPs on CQuIC's core research interests, to develop new research directions for CQuIC's research portfolio, to pursue independent lines of research, and to participate in managing center-wide activities.

Information about ongoing activities at CQuIC can be found at cquic.unm.edu. Questions about these positions should be directed to the Search Coördinator at cquic@unm.edu.

A successful applicant must have completed all requirements for a PhD in physics or a related discipline by the time of employment. Candidates should have a demonstrated record of accomplishment as a theorist in some part of quantum information science; demonstrated potential for research accomplishment at CQuIC; demonstrated potential to contribute to center-wide research-training and scientific-outreach activities; demonstrated potential to work productively with CQuIC personnel at all levels; demonstrated specific interest in CQuIC research; and a demonstrated commitment to diversity, equity, inclusion, and student success, as well as working with broadly diverse communities.

Applicants must apply at UNMJobs (<https://unmjobs.unm.edu>), Position No. 0836099; applicants should submit a cover letter, a CV (including list of publications), and a statement of research interests and plans (pdf files, please) and should specify the names, affiliations, and e-mail addresses of three references. Applicants should ask each of their references to submit a letter of recommendation to cquic@unm.edu. Formal review of applications will begin on November 1, 2016, but applications will continue to be reviewed until all positions are filled and at least until the end of January 2017.

A successful applicant will become a CQuIC Postdoctoral Fellow, with a contract for one year and the expectation that the appointment will be renewed for two additional years upon satisfactory performance.

The University of New Mexico is an Equal Opportunity/Affirmative Action employer and educator. CQuIC is committed to assembling a diverse work force of researchers in quantum information science. Qualified women and minorities are strongly encouraged to apply.