

News, info and updates for MSPQC students at UW-Madison

August 20th, 2021

#### Announcements

### **New MSPQC Student Orientation**

On Monday, August 30th we will welcome our new MSPQC students to campus for in-person orientation activities. Click <a href="here">here</a> for a complete schedule of orientation activities and click <a href="here">here</a> for a checklist of important tasks for new graduate students. Send all questions to <a href="Jackson Kennedy">Jackson Kennedy</a>.

### **Congratulations Graduates!**

On Friday, August 6th, we celebrated our outgoing MSPQC program graduates in a ceremony at the Fluno Center. To view a recording of this ceremony, click <a href="here">here</a> and to view photos from this event, click <a href="here">here</a>. We wish you all the best in your future endeavors and encourage you to connect with us often!

## **CQE: Graduate Students Wanted to Host Educational Videos**

Deadline: August 31st, 2021

The Chicago Quantum Exchange (CQE) is working to produce educational videos on the subject of quantum science and engineering to be posted on the CQE website as well as the CQE Youtube channel. They are seeking two enthusiastic CQE graduate students to host these videos. These videos are aimed at enthusing high school students with an understanding of quantum science and by an emotional/personal connection and excitement that may motivate a future career in quantum science. The hosts will briefly discuss their educational journeys to become quantum scientists, explain fundamental quantum concepts, and lead tours and/or discussions with researchers in CQE facilities, in a way that connects to an audience of high schoolers as they start to think about their upcoming career paths. Graduate students interested in this outreach opportunity should contact Joe Heremans and Katherine Harmon to arrange for a brief remote "audition." Filming will take place in late September/early October, at locations to be decided.

## **Campus Mask Mandate**

Chancellor Rebecca Blank instituted a campus-wide mask mandate effective August 5th. Under this policy, all students, employees, and visitors must wear masks when inside campus buildings. The full policy contains a list of scenarios in which masks may be removed and you can review it here.

# **Professional Development & Events**

## **QED-C Student Research ePoster Sessions**

The Quantum Economic Development Consortium (QED-C) hosts monthly Student Research ePoster Sessions in which students present on their research in quantum computing to a diverse audience of researchers, employers, students, and QED-C community members. Presentations last 10 minutes followed by a 5-minute Q&A session. This is a fantastic opportunity to expand on your presentation skills and to display your prowess in the field of quantum computing. If you are interested in participating, contact Jackson Kennedy.

### **ANL: The Five W's of Quantum**

Date: August 26th, 2021; 7 PM CT

Join two of Argonne's leading scientists in quantum who will present on Argonne's groundbreaking research and provide insight on what quantum information science is; why the development of this science and technology is so important; and who are the research institutions partnering with Argonne to make Chicago a national quantum tech hub. Click here for more information and click here to register to attend.

### CQE: Quantum Sensing in Atomic and Solid-State Systems

Date: September 2nd, 2021; 11 AM CT

The Chicago Quantum Exchange (CQE) will be hosting Hamamatsu. In this talk, Jennifer Choy, Ph.D., of the University of Wisconsin-Madison describes the realization of quantum sensors in two material platforms: neutral alkali atoms and artificial atoms in diamond. To register to attend, click here.

## **CQE: Open Quantum Initiative Workshop**

Date: September 22nd - 23rd; 2021

The Open Quantum Initiative (OQI) is a group of researchers, educators, and leaders among the Chicago Quantum Exchange (CQE) that champions the values of diversity, equity, and inclusion in quantum science. This virtual workshop will discuss the prevailing issues and barriers in the emerging field of quantum computing. Specifically, the workshop will help the CQE develop a program for undergraduate scientists early in their quantum careers to gain research experiences and build professional networks. Workshop participants will learn how they can engage with these efforts and become a more informed member of and advocate for an open quantum community. To register to attend, click here.

## **Quantum Creators Prize Symposium**

Date: September 29th-30th, 2021

The University of Chicago invites applications for its first annual "Quantum Creators Prize Symposium", which will recognize the achievements of early career researchers in the broad areas of Quantum Science and Engineering. Click <a href="https://example.com/here-to-learn-more-and-to-apply.">https://example.com/here-to-learn-more-and-to-apply.</a>

# **Employment Opportunities**

#### **MSPQC Career Toolkit**

MSPQC Program Coordinator Jackson Kennedy manages and updates the MSPQC Career Toolkit. This is the central hub for professional development and job search opportunities for MSPQC students and is updated frequently. Contact <u>Jackson Kennedy</u> with questions, concerns, and suggestions.

### **QED-C Student Database**

QED-C Maintains a database of students obtaining degrees in quantum computing. This database is shared with employers, internship providers, and consortium partners. To add yourself to this database, complete the <a href="Student Info Form">Student Info Form</a> (password: Students@QED-C) and use Jackson Kennedy (jckennedy3@wisc.edu) as your advisor email.

## **Utah State University SDL: Quantum Sensing and Timing Scientist**

The Quantum Sensing and Timing (QST) group at Space Dynamics Laboratory focuses its efforts on building inertial measurement devices, atomic clocks, and other photonics-based quantum sensors. Laboratory activities involve laser cooling of atomic gases, optical tweezers, frequency combs, optical communication, and frequency metrology. This position is first to understand the mission (Position, Navigation, and Timing applications), and then to imagine what sort of photonic/atomic device could address the mission, work with the team to design the overall sensor concept (utilizing appropriate modeling platforms), and ultimately build the sensor. Applicants with a Master's degree are invited to apply. Click here to apply.

### **CQE:** Assistant Director of Industry Partnerships

The Chicago Quantum Exchange (CQE) is hiring an Assistant Director of Industry Partnerships. The Assistant Director of Industry Partnerships will be responsible for developing and assisting in the management of a portfolio of industry partners for the CQE. This position will assist in cultivating and maintaining strategic partnerships for the CQE and assist in operational planning and execution for various activities related to industry engagement, including the development of processes for tracking, and streamlining partner engagements. Students with a Master's degree are invited to apply. Click here to apply.

## Protiviti Technology: Emerging Technology Consultant

Emerging Technology Consultants work with Protiviti Technology's clients, who are typically among the world's leading companies. Consultants compile and analyze data and document findings through client engagements. Through interaction with client and project team personnel, consultants develop professional relationships that contribute to exceptional client service. The Emerging Technologies group covers a wide range of work, including Quantum technology. Desired technical skills include basic knowledge of quantum computing and post-quantum cryptography; candidates should have an interest in developing quantum computing use cases and coding in quantum SDKs or popular cloud platforms (IBM, Microsoft Azure Quantum, Amazon Braket). Positions are available in Chicago and other cities across the USA. Click <a href="here-to-apply.">here-to-apply.</a>

## **Qubit by Qubit: Teaching Assistant**

Deadline: August 22nd, 2021

Qubit by Qubit is seeking applications for teaching assistant roles in their upcoming two-semester Introduction to Quantum Computing course for high school students. Through two semesters of weekly lectures, lab sections, and homework assignments, students will develop a foundational understanding of quantum computing. TAs are an integral part of the academic year program and the student experience. They are responsible for leading weekly lab sections and supporting student support needs. Click <a href="here">here</a> for the position description, click here to apply, and send all questions to Kiley Foster.

# **Dates and Deadlines from the Office of the Registrar**

# **MSPQC Career Toolkit**

## **MSPQC Handbook**

**Professional Development from the Graduate School** 

# Connect with us!







# **Department of Physics**

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This newsletter is for MSPQC students at UW–Madison; we update the mailing list at the start of each semester. Please contact <u>Jackson Kennedy</u> with any questions.