



UW Department of Physics Graduate Programs

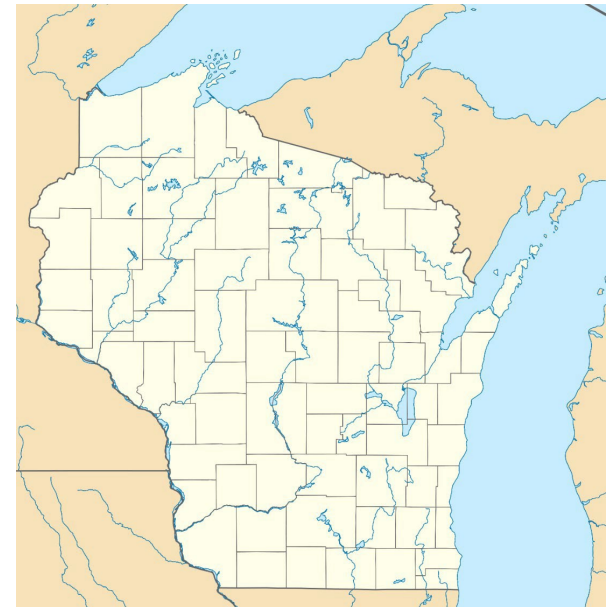
University of Wisconsin-Madison

Sharon Kahn - PhD-Physics, Graduate Program Manager

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Madison

- Population: 269,840
- Metropolitan area: 505,954
- Second largest city in Wisconsin
- Capital city
- Biking, food, parks, lakes, trails, festivals, museums
- Epic, American Family Insurance, Exact Sciences, Google regional office
- 4-hour drive to Minneapolis
- 3-hour drive to Chicago
- 90-minute drive to Milwaukee



UW-Madison MSPQC Program

1st MSPQC in the U.S. (2019)

Addresses a need in the growing quantum industry:

- Students with classroom training, independent project experience, and laboratory experience who can join the workforce in less time than a PhD student

Designed so all STEM backgrounds can be successful

Flexible academic plans

- 3 to 6-semester plans available

Blends...

- Classroom instruction
- Independent projects/research experience (internship opportunities)
- Laboratory experience

MSPQC Program Overview

- \$1600/credit + Fees & Cost of Living
- 30 credits required
- Advised by MSPQC Faculty
- Minimum 3.0 GPA during program
- <https://www.physics.wisc.edu/graduate/mspqc-program/>

MSPQC Program Required Courses						
Course #	Title	Credits	Fall 2023	Spring 2024	Summer 2024	G50%
PHYS 701	Graduate Seminar	1				Y
PHYS 707	Quantum Computing Lab	4				Y
PHYS 709	Intro to Quantum Computing	3				Y
PHYS 779	Advanced Quantum Computing	3				Y
PHYS 799	Independent Study (Research)	1 - 3				Y
MSPQC Program Physics Core Elective Courses						
PHYS 448	Atomic & Quantum Physics	3				
PHYS 449	Atomic & Quantum Physics	3				
PHYS 531	Intro to Quantum Mechanics	3				Y
PHYS 545	Intro to Atomic Structure	3				Y
PHYS 551	Solid State Physics	3				Y
PHYS 731	Quantum Mechanics	3				Y
PHYS 751	Advanced Solid State Physics	3	<i>occasional</i>			Y

MSPQC Program Application

Fall 2025 Deadline: March 15, 2025

<https://grad.wisc.edu/apply/>

- 3 Letters of recommendation (professional and/or academic)
 - Your references will be sent an automated email via the application
- Unofficial transcripts from all prior institutions of higher education
- English language proficiency scores (if required)
 - <https://grad.wisc.edu/apply/requirements/>
- Statement of Purpose
 - Purpose: to better understand your academic and professional background, motivations, goals, etc.
 - Address “why this program at UW?”
 - <https://grad.wisc.edu/apply/prepare/>
- Financial information (international students only)
- No GRE score will be considered




UW-Madison Physics PhD Program

- First PhD awarded by UW-Madison Physics in 1899. Over 1500 PhDs completed since.
- All admitted PhD students are provided a guarantee of 5 years of financial support.
- Graduate assistantships include tuition remission and eligibility for health insurance

PHYSICS PHD PROGRAM

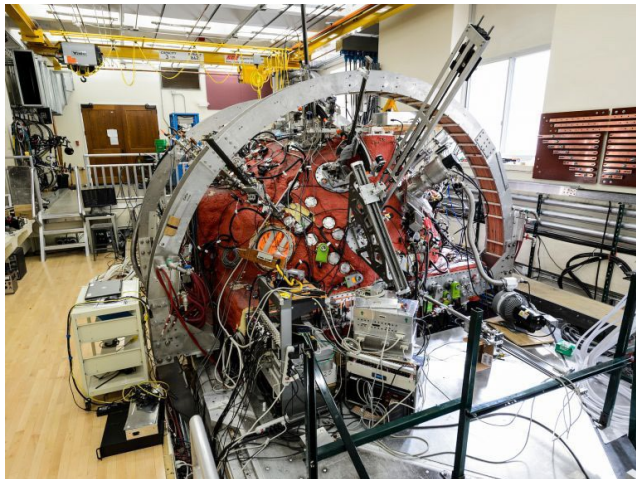
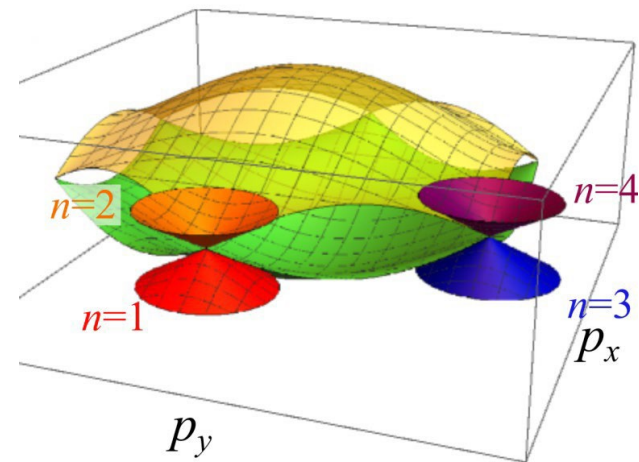
- 174** Students
- 5.7** Years median time to graduation
- 5** Years guaranteed support as TA
- 51** Credits required to graduate
- 33%** International students
- 20%** Female students
- 4%** Targeted minorities

UW-MADISON GRADUATE SCHOOL

- #1** In Ph.D.s awarded nationally
- #5** In federal support of graduate students
-  Professional development opportunities and student support services
-  Apply to three programs with one application fee
-  Application fee waivers available

PhD Program Overview

- Average length of stay = 6.7 years
- Five core courses
 - Physics 711 – Theoretical Physics - Dynamics
 - Physics 715 – Statistical Mechanics
 - Physics 721 – Theoretical Physics - Electrodynamics
 - Physics 731/732 – Quantum Mechanics
- Qualifying exam by start of 4th semester
- Preliminary exam by end of 6th semester
- 51 credits required



- Research opportunities across all areas of physics
- Wide range of opportunities for graduates in academia, industry, government and beyond.

PhD Program Application

- [UW-Madison Graduate School Application](#)
- Required Documents by December 15th, 2024:
 - 3 Letters of recommendation (professional and/or academic)
 - Your references will be sent an automated email via the application
 - The most impactful letters come from current or past research advisors
 - Unofficial transcripts from all prior institutions of higher education
 - [English language proficiency](#) scores (if required)
 - Resume/CV
 - Personal statement
 - [Describe your relevant prior experiences](#) and future research interests and goals.
 - Financial information (international students only)
 - The subject GRE is optional, but recommended in these circumstances:
 - Your transcript does not accurately reflect your academic strengths
 - If including the score would significantly strengthen your application
 - Physics Theory is your primary research interest

What's Next?

- PhD Application Deadline: December 15, 2024
- MSPQC Application Deadline: March 15, 2024
- Check our [prospective student page](#) for updates and future [webinars](#).
- Send all questions to our graduate office, physgrad@physics.wisc.edu