Thursday, May 9: Thesis Defense: "Higher-Order Interaction Inhibits Bacterial Invasion of a Phototroph-Predator Microbial Community"

Friday, May 10: Thesis Defense: "Entanglement, Topology, & Renormalization"

Saturday, May 11: CU Astronomical Society and Starkel Planetarium

Saturday, May 11: Commencement

Monday, May 13: First Day of Instruction, Summer Term 1

Visitors:
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Visitors:

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Thesis Defense

**Title:** Entanglement, Topology, & Renormalization

**Speaker:** Jackson Fliss (University of Illinois at Urbana-Champaign)

**Date:** Friday, May 10, 2019

**Time:** 2:00 pm

**Location:** 464 Loomis
Thursday, May 9: Thesis Defense: "Higher-Order Interaction Inhibits Bacterial Invasion of a Phototroph-Predator Microbial Community"

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**CU Astronomical Society and Staerkel Planetarium**

**Date:** Saturday, May 11, 2019

**Time:** 8:00 am-12:00 pm

**Location:** Urbana's Market at the Square: Corner of Illinois and Vine St.

This week, our popular "Ask a Scientist" booth features the Champaign-Urbana Astronomical Society and Staerkel Planetarium!
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### Scientific Exhibit

**Title:** Phys498-ART Culminating Event: Science for the Senses

**Speaker:** Students of Phys498-ART Where the Arts meets Physics

**Date:** Friday, May 3, 2019  
**Time:** 5:00 am

"Science for the Senses", is the culminating public event for the project-based course Phys498-ART, Where the Arts Meets Physics, conducted by Prof. Smitha Vishveshwara and teaching assistants Jackson Fliss and Danielle Markovich, and is part of the May Urbana's First Friday. Drop by anytime 5-7pm. All ages welcome. Experience the universe and physics at play through song, illustration, poetry, and even cooking.

- Exhibits created by students include:
  - Black holes and gravitational waves swirling in Japanese print;
  - An electron's adventures with lasers in animation;
  - The universe cooked in six delicious courses;
  - Pen-paper-coffee based renditions of solar system models;
  - A lunar lander living space;
  - Mass and time units grooving to live music;
  - 13 billion years in 13 melodic minutes.

And more! Students will be available to discuss, discourse, and delight throughout the event.

**Facebook Event with Info:** [https://www.facebook.com/events/2325391507750113/](https://www.facebook.com/events/2325391507750113/)
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**Associate/Full Professor Position In Computational Condensed Matter Physics**

**School:** The University of Tennessee

The Department of Physics and Astronomy in collaboration with the Department of Electrical Engineering and Computer Science at the University of Tennessee (UT) invites applications to fill a tenured faculty position in the College of Arts and Sciences at the associate/full Professor level. The successful candidate will hold a joint appointment in the Department of Physics and Astronomy (primary) and the Department of Electrical Engineering and Computer Science. The emphasis of this search is to strengthen our efforts in the development of new algorithms for computational condensed matter physics research within both departments. A further expansion in the area of quantum materials and quantum information is anticipated, which will be supported by junior-level hires following the successful completion of this search.

Candidates should have a PhD in Physics or related field, a strong research record in computational condensed matter physics, experience in the development of simulation algorithms for quantum materials, and background in computer science with an emphasis on novel approaches such as machine learning and other promising techniques. The candidate is also expected to actively participate in a cluster hire on quantum materials in progress at UT, provide leadership in developing a synergistic interdisciplinary quantum materials program, establish an externally funded research program, provide interdisciplinary training for graduate students and postdoctoral researchers, and to contribute to the teaching mission of the departments at both the undergraduate and graduate levels. While the preferred expertise should be in the broad area of algorithmic development for quantum many body physics, a strong interest in bridging the efforts of the above-mentioned departments is highly desirable.