



Physics

GRADUATE STUDIES AT UC MERCED

PROGRAM HIGHLIGHTS

Our research program is strongly focused on interdisciplinary collaborations, which allows us to work in both established research areas such as condensed matter, atomic, molecular and optical (AMO), statistical physics and nanoscience, while pursuing emerging fields, including soft matter, metamaterials, quantum information, solar energy and biological physics.

The researchers in our group have access to major facilities, such as state-of-the-art laser systems, an electron microscopy facility, a nanofabrication facility and NMR on campus. Other large facilities, such as synchrotron light sources located at Stanford and Berkeley, are a short drive away and are routinely used by students and faculty members.

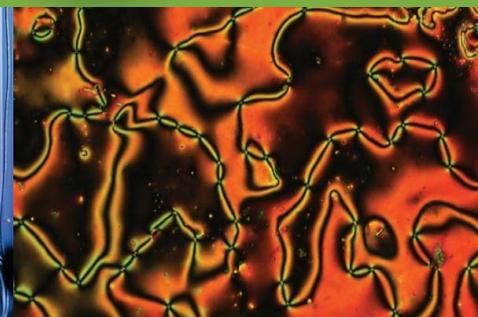
RESEARCH AREAS

UC Merced offers a unique academic atmosphere that fosters interdisciplinary research—connecting physical sciences research to life sciences, materials sciences and engineering. Our graduate students have the opportunity to pursue doctoral degrees while working on a broad range of research topics.

- › Experimental condensed matter: nanoparticle-based metamaterials, strongly correlated systems, magneto-optical phenomena
- › Theoretical condensed matter and atomic physics: superfluids, superconductivity, ultra-cold atoms, quantum optics, superconducting quantum computing, nanomechanics
- › Experimental atomic, molecular and optical physics: photonic and electronic quantum information systems, ultrafast lasers
- › Experimental biophysics and soft matter: single molecule studies, ensembles of molecular motors, biomaterials, liquid crystals
- › Theoretical biophysics and soft-matter physics: biopolymers, disordered proteins, motors, elasticity
- › Theoretical statistical physics and nonlinear dynamics: non-equilibrium systems, swarming, chaos
- › Thermodynamically efficient solar energy conversion: non-imaging optics, energy materials

AFFILIATED RESEARCH CENTERS AND INSTITUTES

- › Center for Cellular and Biomolecular Machines (NSF-CREST)
- › Merced NANomaterials Center for Energy and Sensing (MACES)
- › University of California Advanced Solar Technologies Institute (UC Solar)
- › Health Sciences Research Institute (HSRI)



FUNDING OPPORTUNITIES

All doctoral students in good standing are eligible for year-round financial support, including payment of fees and tuition. Teaching assistantships normally provide initial funding that can be supplemented by research money, fellowships or other forms of financial assistance.

In addition, travel fellowships and application fee waivers are available for qualified applicants.

TO APPLY

Apply online at graduatedivision.ucmerced.edu. Applications are due by Jan. 15, and early submission is encouraged.

FOR MORE INFORMATION, GO TO

physics.ucmerced.edu or contact the graduate group Chair Professor Linda Hirst at lhirst@ucmerced.edu.



GRADUATE DIVISION
Physics

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