



Physics

Graduate Studies at University of California, 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) physics; and 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, computing clusters, 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. We also collaborate with other nearby institutions such as Lawrence Livermore National Laboratory and UC Davis, Santa Cruz, and San Francisco.

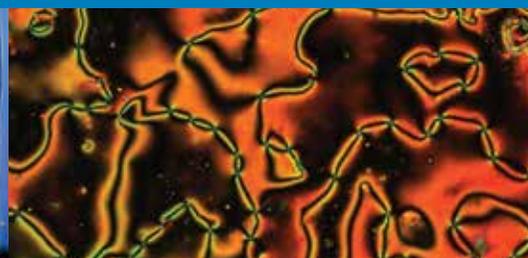
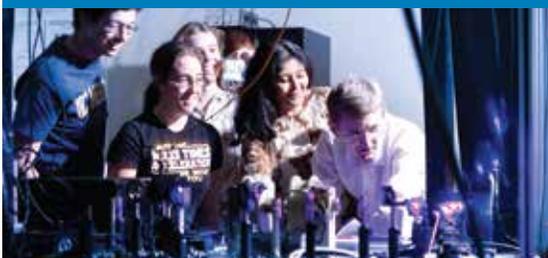
RESEARCH AREAS

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

- › Experimental condensed matter: nanoparticles, metamaterials, strongly correlated systems, magneto-optical phenomena
- › Theoretical condensed matter and atomic physics: optoelectronic and photovoltaic materials, superfluids, superconductivity, ultra-cold atoms, quantum optics, 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

- › NSF-CREST Center for Cellular and Biomolecular Machines (CCBM)
- › 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 assistantships, fellowships or other forms of financial assistance including travel awards.

Application fee waivers are available for qualified domestic applicants.

TO APPLY: Apply online at graduatedivision.ucmerced.edu.

- › **PRIORITY DEADLINE:** December 31, 2017 (*applications will receive priority review*)
- › **GENERAL DEADLINE:** January 15, 2018 (*any applications after this date will be reviewed on a rolling basis if space is available*)

FOR MORE INFORMATION: Visit physics.ucmerced.edu and contact Sayantani Ghosh, graduate group chair, or David Strubbe, admissions chair.

Faculty

PHYSICS



CHIH-CHUN CHIEN

Theoretical condensed matter, superfluids and superconductors, non-equilibrium physics of ultra-cold atoms, energy transport, novel hybrid quantum systems

e: cchien5@ucmerced.edu

w: sites.google.com/site/chienchihchun

RAYMOND CHIAO

Nonlinear and quantum optics, experiment and theory; detection of gravitational radiation

e: rchiao@ucmerced.edu

w: faculty1.ucmerced.edu/rchiao

SAYANTANI GHOSH

Experimental condensed matter physics, magnetism, metamaterials, nanoscience and quantum systems

e: sghosh@ucmerced.edu

w: faculty1.ucmerced.edu/sghosh

AJAY GOPINATHAN

Theoretical biophysics and soft condensed matter physics

e: agopinathan@ucmerced.edu

w: faculty1.ucmerced.edu/agopinathan

LINDA HIRST

Experimental soft condensed matter physics, biophysics, liquid crystals, nano-materials and colloids

e: lhirst@ucmerced.edu

w: faculty.ucmerced.edu/lhirst

DUSTIN KLECKNER

Experimental soft condensed matter, fluids and colloids

e: dkleckner@ucmerced.edu

w: faculty.ucmerced.edu/dkleckner

BIN LIU

Experimental soft condensed matter physics, biophysics, complex fluids, origami mechanics

e: bliu27@ucmerced.edu

w: binliulab.com

CARRIE MENKE

Physics education research and program assessment

e: cmenke@ucmerced.edu

w: faculty.ucmerced.edu/cmenke

KEVIN MITCHELL

Nonlinear dynamics and chaos, with applications to AMO (atomic, molecular and optical) physics and fluid dynamics

e: kmitchell@ucmerced.edu

w: mitchellchaos.com

MICHAEL SCHEIBNER

Light-matter interactions, nanostructured materials, coupled quantum systems and quantum information

e: mscheibner@ucmerced.edu

w: faculty.ucmerced.edu/mscheibner

JAY SHARPING

Ultrafast laser technology and applications in physics, chemistry and biology

e: jsharping@ucmerced.edu

w: faculty.ucmerced.edu/jsharping

DAVID STRUBBE

Theoretical condensed matter and materials science, electronic and optical properties, amorphous materials, photovoltaics, nanoscience, high-performance computing

e: dstrubbe@ucmerced.edu

w: faculty.ucmerced.edu/dstrubbe

LINTIAN

Theoretical quantum optics, quantum information processing and quantum simulation in condensed matter systems

e: ltian@ucmerced.edu

w: faculty.ucmerced.edu/ltian

ROLAND WINSTON

Solar power and renewable energy, elementary particle physics, nonimaging optics

e: rwinston@ucmerced.edu

w: ucsolar.org

JING XU

Experimental biophysics, quantitative biology, optical trapping, single-molecule ensemble experiments, molecular motors

e: jing.xu@ucmerced.edu

w: faculty.ucmerced.edu/jxu

AFFILIATED FACULTY:

Venkatraman Ayyaswamy, plasma physics

Mehmet Baykara, tribology and surfaces

Mike Colvin, biomolecular simulation

Arvind Gopinath, biophysics

Jennifer Lu, functional materials synthesis

Victor Munoz, biophysics

Alex Noy, biomaterials

Anand Subramaniam, biomaterials

Vincent Tung, energy materials synthesis

Tao Ye, bio/nano interfaces

PRINTED ON RECYCLED PAPER
SEPTEMBER 2017



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Graduate Division
Physics

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