Celebrating women in UCI Physical Sciences

Sunday, March 08, 2020

In physical sciences, we celebrate #InternationalWomensDay and #WomensHistoryMonth. Here are a few inspirational women with pioneering research in our school:



Zuzanna Siwy

Professor
Department of Physics & Astronomy

Professor Siwy is an experimental biophysicist and condensed matter physicist interested in mimicking devices and systems in biology. She is also interested in unraveling new phenomena that occur at the nanoscale.

UCI Department of Physics & Astronomy



Tammy Smecker-Hane

Associate Professor
Department of Physics & Astronomy

Professor Smecker-Hane's research focuses on measuring the ages and chemical compositions of stars in nearby galaxies to understand how galaxies have evolved over time from the Big Bang until now. She teaches astrophysics lab to junior/senior physics majors, basic physics to biological science students, and introductory astronomy to non-science majors. She is the leader the UCI Astronomy Outreach Program, which brings hands-on activities in astronomy and portable telescopes for star-gazing to K-12 grade students. She is also the co-director of the Cal-Bridge program, whose goal is to increase the number of women and minority students who successfully transition from undergraduate physics majors at Cal State University campuses to graduate school in physics & astronomy at the University of California campuses.

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Simona Murgia

Associate Professor
Department of Physics & Astronomy

"The focus of my research is understanding the nature of dark matter and dark energy. I study dark matter by searching for the debris produced by dark matter particles annihilating in space. Some of that debris might include gamma rays and I use the data collected by Fermi LAT, a gamma-ray space based telescope, to search for this signal."

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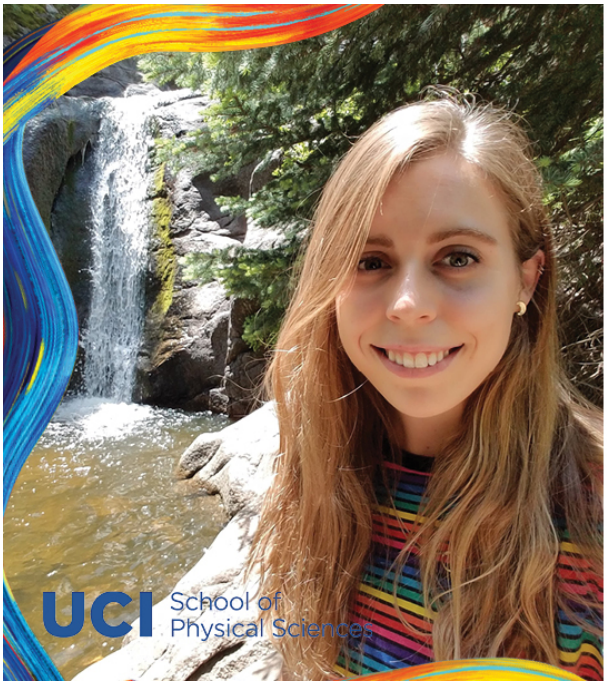


Elizabeth Bess

Assistant Professor
Department of Chemistry

"I am a scientist who likes to play on the chemistry–biology continuum. My laboratory studies the molecular-level mechanisms that connect the trillions of bacteria in the human gut microbiome to health and disease. Two areas of current research in the lab are discovering (1) how the gut microbiome controls development of Parkinson's disease and (2) how gut bacterial unlock the beneficial effects of a diet rich in whole grains and vegetables. Our long-term goal is to use our findings to precisely engineer the composition and function of human gut microbiomes to reduce the risk of microbiome-dependent disease."

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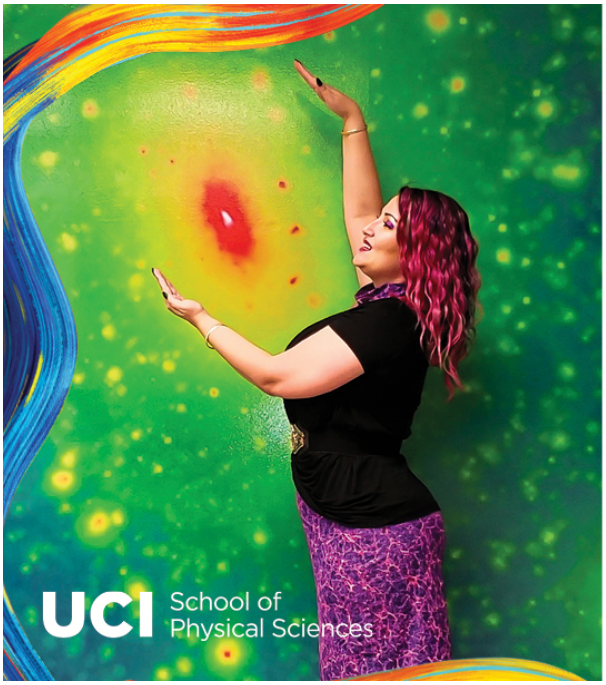


Genevieve DeGrandchamp

Graduate Student
Department of Physics & Astronomy

"I'm a third year graduate student and I research high frequency energetic particle-driven instabilities on the DIII-D tokamak in San Diego."

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Sophia Gad-Nasr

PhD Student, Physical Sciences Scicomm Fellow
Department of Physics & Astronomy

"I'm a 3rd year cosmology and astroparticle theory grad student. I use simulations and theory to study dark matter, a mysterious type of matter that is 5 times as abundant as the normal matter we can see and detect, yet can only track it through its interactions with gravity as it does not interact with light. Learning about the particle properties of dark matter could help future experiments detect it, and give us a better understanding of the Universe we live in."

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Suzanne Blum

Associate Professor
Department of Chemistry

"I'm a mechanistic chemist who loves figuring out how things work. My research group studies mechanisms related to synthetic organic and organometallic chemistry. We develop single-molecule microscopy tools to study mechanisms with unprecedented sensitivity, and test our mechanistic thinking in the design of new borylative heterocyclization reactions."

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