



University Awards for Research, Scholarship & Creative Activity

EARLY-CAREER FACULTY

RODOLFO BARNIOL DURAN, Ph.D. Assistant Professor of Physics and Astronomy

SENIOR FACULTY

HAKAN OZCELIK, Ph.D. Professor of Management and Organizations

Award Ceremony & Lecture

October 1, 2021 • 12 pm Virtual Event via Zoom



Welcome

Sadaf Ashtari, Professor of Information Systems and Business Analytics and Chair of the Research and Creative Activity Subcommittee

Steve Perez, Provost and Vice President, Academic Affairs

William DeGraffenreid, Vice Provost (Interim), Faculty Affairs

Presentation of Award Recipient for Early-Career Faculty

Christopher Taylor, Chair of the Department of Physics and Astronomy

Early-Career Faculty Award Lecture

From Black Holes to Fireworks: Understanding Astrophysical Jets Rodolfo Barniol Duran, Assistant Professor of Physics and Astronomy

Presentation of Award Recipient for Senior Faculty

Ryan Fuller, Professor of Management and Organizations

Senior Faculty Award Lecture

Sensing the Elephant: Workplace Loneliness Research Stream Hakan Ozcelik, Professor of Management and Organizations

This event is co-hosted by the Faculty Senate Research and Creative Activity (RCA) Subcommittee and the Offices of Research, Innovation, and Economic Development.

For more information about this award program, please visit csus.edu/research

Award History*

University Award for Research, Scholarship & Creative Activity for Early-Career Faculty

This award was established in 1989 and is given each year to recognize a colleague in the first ten years of their faculty appointment who has made significant contributions to his or her discipline through scholarly activity, research and publication, or creative and artistic endeavors.

2019-2020

Arturo Baiocchi Social Work

2018-2019

Sharon Furtak Psychology

2017–2018

Robert Crawford Biological Sciences

2016-2017

Brendan Lindsay History

2015-2016

Nikolaos Lazaridis History

2014-2015

Caroline Turner Education

University Award for Research, Scholarship & Creative Activity for Senior Faculty

This award was established in 1961 and is given annually to a faculty member who, over many years, has made significant contributions of a discipline through scholarly, activity research, publication and creative and artistic endeavors.

2019-2020

Mona Siegel History

2018-2019

Barbara Carle World Languages & Literatures

2017–2018

Maureen Smith Kinesiology and Health Science

2016-2017

Jamie Kneitel Biological Sciences

2015-2016

Rafael Escamilla Physical Therapy

2014–2015

Douglas Rice English

*The full list of award recipients can be found online at csus.edu/research

RODOLFO BARNIOL DURAN, Ph.D. Assistant Professor of Physics and Astronomy

> From Black Holes to Fireworks: Understanding Astrophysical Jets



Abstract

Black holes are among the most compelling cosmic mysteries known to science. They launch powerful jets with velocities close to the speed of light. Light emitted from these jets reaches Earth and can be detected, allowing us to learn more about how matter behaves under such energetic conditions. No laboratory on Earth can replicate these conditions, so we must turn to the Universe for answers.

Just a few years ago, gravitational waves were detected for the first time, giving us a brand-new view of the Universe and a revolution in the field of Astrophysics. Dr. Barniol Duran and his collaborators have explored and helped decipher these latest observations through their groundbreaking work on astrophysical jets and black holes. In this lecture, Dr. Barniol Duran will discuss his current efforts in the study of gravitational waves and light emitted from astrophysical sources, a topic at the forefront of Astrophysics research.



Dr. Rodolfo Barniol Duran is a theoretical astrophysicist. His research focuses on High Energy Astrophysics, particularly gamma-ray bursts, compact objects, plasma astrophysics and jet physics.

Dr. Barniol Duran was born and raised in Ecuador. He completed his undergraduate education (B.S., Physics Engineering) at the Instituto Tecnológico de Monterrey in Mexico. During his undergraduate career, he studied abroad for a year at the University of California, Berkeley, where he took his very first astronomy course, fell in love with the study of the cosmos, and decided to make it the subject of his life's work.

Dr. Barniol Duran went on to complete his graduate education (Ph.D., Physics) at the University of Texas at Austin, where he developed a specified interest in gamma-ray bursts. Following his doctorate, he worked as a Postdoctoral Fellow at the Racah Institute of Physics at Hebrew University of Jerusalem and then a Postdoctoral Research Associate at the Department of Physics and Astronomy at Purdue University in Indiana. He joined the Sacramento State Department of Physics and Astronomy as an Assistant Professor in 2017.

Dr. Barniol Duran and his colleagues have published 45 peer-reviewed articles, 17 of which have been published since he arrived at Sacramento State. He currently is the Principal Investigator of a three-year National Science Foundation (NSF) proposal with collaborators at Purdue University and Northwestern University: "Short Gamma-Ray Bursts Arising From Misaligned Structured Jets in the Dawn of Gravitational Wave Astronomy." Dr. Barniol Duran studies astrophysical explosions, which involve black holes, neutron stars and powerful jets. He uses computational methods to better understand how matter behaves under the extreme conditions of these explosions.

In his short time at Sacramento State so far, Dr. Barniol Duran has mentored ten undergraduate students in research projects. He has also mentored several students through the Cal-Bridge program, a prestigious NSF-funded program founded with the goal of increasing diversity in the STEM community by providing students with financial aid, mentoring and workshops. Dr. Barniol Duran was also recently recognized with the 2020 CSUS Retirees Association Junior Faculty Research Award.

Dr. Barniol Duran's dynamic speaking style and passion for his work provide a valuable link between the University and the public. He served as the co-organizer of Sacramento State's Solar Eclipse Viewing event on August 21, 2017, which attracted more than 500 members of the Sacramento State and wider Sacramento community. Dr. Barniol Duran also served as the department's media spokesperson prior to and during the event, appearing in both English and Spanish interviews on local television, radio, and print outlets. He provides another important connection to the local Spanish-speaking community as a volunteer presenter for the Sacramento State Planetarium, where he has presented the planetarium's first and only shows in Spanish, in addition to several shows in English. He also organized a youth solar science event at a local library in the summer of 2019, which attracted over 70 members of the public for a solar viewing and several STEM sun-related activities. HAKAN OZCELIK, Ph.D. Professor of Management and Organizations

> Sensing the Elephant: Workplace Loneliness Research Stream



Abstract

Workplace loneliness has received increasing attention during the pandemic as employees around the world have been mandated to work from home, in social isolation. Even before the pandemic, loneliness in larger society has been declared as a "modern epidemic" with several adverse cognitive, behavioral, and health outcomes, in need of treatment.

Loneliness prompts psychological mechanisms that make it different from other experiences such as solitude, depression, being alone, and isolation. It is an interpersonal phenomenon involving both the lonely individuals and the people from whom they feel disconnected.

Why should organizations care about workplace loneliness? Does loneliness beget loneliness? Why do people experience workplace loneliness? Dr. Hakan Ozcelik has been pursing such questions via different methods including longitudinal surveys, fMRI-based experiments, and film-making. In this lecture, Dr. Ozcelik will provide insights from his studies, which, together, aim to develop a deeper sense to tackle workplace loneliness.



Dr. Hakan Ozcelik is a Professor of Management in the College of Business. He received his Ph.D. in Organizational Behavior from the University of British Columbia, in Canada; and earned a double-major degree in Management and Political Science, and an MBA from Bogazici University, in Turkey. He studies emotions in organizational life, focusing on topics such as workplace loneliness, discrete emotions, surface acting, leadership, emotional climate, decision-making, cross-cultural communication, well-being, organizational neuroscience, and utilizing film-making to analyze work emotions. He has published his research in prestigious journals, including Academy of Management Journal, Organization Science, Journal of Organizational Behavior, American Psychologist, International Journal of Human Resource Management, Journal of Managerial Psychology, Personnel Review, Journal of Management Education, and Academy of Management Best Papers Proceedings.

Dr. Ozcelik is an internationally renowned scholar, who has been invited to present in prestigious universities including the Sorbonne University and ECSP University in Paris, France; University of Rome Sapienza in Rome, Italy; the University of Victoria in Canada; Bogazici University and Sabanci University in Turkey; and Copenhagen Business School in Denmark. In addition, he has been invited to speak in events organized by non-profit organizations such as Health Enhancement Research Organization and the Boston College Center for Work and Family.

Findings of Dr. Ozcelik's research have been featured in several media outlets, including New York Times, The Guardian, Fortune Magazine, Harvard Business Review, Bloomberg, The Washington Post, Ladders, Comstock's Magazine, and CNN. He has also been invited for TV interviews at the KCRA to comment about telecommuting and loneliness, and more recently in a news story about science of happiness. In addition, he has provided insights about emotions and new gender norms in organizations in a live conversation at the Fox TV Newsroom. He has participated in national podcasts, as well, such as World Blu, Redesigning Wellness, Wharton Business Daily, Teaching in Higher Ed, and Distancing Socially, to bring suggestions about how to enhance relational well-being in organizations, based on his research expertise.

During his career at Sacramento State, Dr. Ozcelik has also implemented innovative strategies to translate his expertise into projects for his students and public. He leads the Annual COB Film Festival program for more than a decade and has worked with more than 400 students to produce and publicly present about 60 experimental film-projects integrating emotional intelligence concepts with leadership theories. He also co-leads the COB Organizational Wisdom Studio to generate and communicate wisdom about organizationally important topics via live-events and video-episodes. More than 25 video-episodes have been digitally published, thus far, viewed by about 11,000 people. Dr. Ozcelik's accomplishments have been acknowledged with numerous awards, including the system-level CSU Faculty Innovation Leadership Award, CSUS Outstanding Research Award, and CSUS Outstanding Teaching Award.

Dr. Ozcelik considers himself a lifetime scholar with a regenerative curiosity to explore the interplay between human nature and organizations. He is married and has one son and one daughter, who make him and his wife learn to rediscover the joys of life.



Thank you to the 2020-21 Research and Creative Activity Subcommittee for their work in selecting these two outstanding faculty recipients.

Nancy Sweet, English, College of Arts and Letters (Chair)

Sadaf Ashtari, Information Systems and Business Analytics, College of Business

Johannes Bauer, Chemistry, College of Natural Sciences and Mathematics

Anna Harper, University Library

June Hee Kwon, Asian Studies, College of Social Sciences and Interdisciplinary Studies

Lisa Romero, Doctorate in Educational Leadership, College of Education

Abhijeet Shirsat, Recreation, Parks, and Tourism Administration, College of Health and Human Services

Atousa Yazdani, Electrical Engineering, College of Engineering and Computer Science



California State University, Sacramento 6000 J Street Sacramento, CA 95819 Phone: 916-278-4918 csus.edu/research