

Jonas Mureika

Professor of Physics at Loyola Marymount University

Los Angeles, CA, US

Seaver College of Science and Engineering

Biography

Contact: Phone: 310.338.7809 Email: Jonas.Mureika@lmu.edu Office: Seaver 102A Dr. Mureika spent much of his academic training at the University of Toronto, where he earned his B.Sc. in astronomy and physics and Ph.D. specializing in theoretical cosmology. He also holds an M.Sc. from the University of Waterloo where he studied particle physics. His research is focused on modified theories of gravitation, from implications for early Universe cosmology, to micro black hole formation in high energy particle collisions. One such proposal that Dr. Mureika has helped advance is the idea that at high energies, the effective dimensionality of space decreases. A novel implication of this theory is that the universe was effectively one-dimensional in the moments following the Big Bang. Dr. Mureika is currently interested in the observational signatures of quantum gravity that might arise in future experiments, including LIGO gravitational wave detections, and imaging of supermassive black holes through the Event Horizon Telescope.

Industry Expertise

Research, Education/Learning

Areas of Expertise

Nuclear Weapons, Black Holes, Models of Athletics, Teaching, Theories of Gravitation, Particle Physics, Theoretical Cosmology, Physics

Affiliations

KITP Research Scholar, Kavli Institute for Theoretical Physics, International Society on General Relativity and Gravitation, American Physical Society, Division of Gravitational Physics, Canadian Association of Physicists, Division of Theoretical Physics

Education

University of Toronto

Ph.D. Physics

University of Waterloo

M.Sc. Physics

University of Toronto
B.Sc. Astronomy and Physics

Accomplishments

2021-24 KITP Scholar

Kavli Institute for Theoretical Physics, University of California, Santa Barbara research fellowship

2020 President's Fritz B. Burns Distinguished Teaching Award

LMU faculty teaching award

2020 Teacher Eddy Award

LAX Coastal Chamber of Commerce community award

2018 Elizabeth and Michael Rudinica Award for Student-Faculty Research

Frank R. Seaver College of Science and Engineering research award

[Please click here to view the full profile.](#)

This profile was created by [Expertfile.](#)