

Jonas Roman Mureika

Tel.: +1 (310) 338-7809 Email: jmureika@lmu.edu Web: <https://jmureika.lmu.build/>

Citizenship: Canada, USA **Languages:** Fluent in English and French (spoken, written, reading)

Education

- Ph.D., Department of Physics, University of Toronto (2002)
Thesis: Topics in Multifractal Analysis of Two- and Three-Dimensional Structures in Spaces of Constant Curvature (Advisor: Dr. Charles C. Dyer)
- M.Sc., Department of Physics and Astronomy, University of Waterloo (1995)
Thesis: Gravitationally-Induced Three-Flavor Neutrino Oscillations as a Possible Explanation of the Solar Neutrino Problem (Advisor: Dr. Robert B. Mann)
- B.Sc., University of Toronto, Physics and Astronomy Specialist Program (1993)

Academic and Leadership Appointments

- Professor with tenure (2013 - present)
Department Chair (2016 - 2022)
Associate Professor with tenure (2008 - 2013)
Assistant Professor (2004 - 2008)
Department of Physics, Loyola Marymount University, Los Angeles, CA
- Visiting Assistant Professor of Physics (2001 - 2004)
W. M. Keck Science Center, Claremont McKenna, Pitzer, and Scripps Colleges, Claremont, CA
- Visiting Lecturer of Physics (2003 - 2004)
Department of Physics and Astronomy, Pomona College, Claremont, CA
- Visiting Lecturer of Mathematics (Sep 2003 - Dec 2003)
Department of Mathematics, Scripps College, Claremont, CA
- NSERC Postdoctoral Fellow (2002 - 2003)
W. M. Keck Science Center, Claremont McKenna, Pitzer, and Scripps Colleges, Claremont, CA

Academic Honors

- 2020 LMU President's Fritz B. Burns Distinguished Teaching Award
- 2020 LAX Coastal Chamber of Commerce Teacher Eddy Award
- 2018 LMU Elizabeth and Michael Rudinica Award for Student-Faculty Research

External Grants and Fellowships

- KITP Scholar Research Fellowship, Kavli Institute for Theoretical Physics, University of California Santa Barbara (2021 - 2023)
- Deutsche Forschungsgemeinschaft (DFG) conference grant: €24,000 (2017, 2015, 2013) (co-organizer with P. Nicolini, M. Kaminski, M. Bleicher)
- Research Corporation for Science Advancement Cottrell College Science Award: \$31,430 USD (2007 - 2010)
- NSERC Postdoctoral Fellowship, Applied Mathematics: \$70,000 CDN (2002 - 2003)

Internal Grants and Fellowships

- LMU Seaver Faculty Fellowship: \$5000 USD (2020/21)
“Extended Uncertainty Principle Effects in Supermassive Black Holes”
- LMU Continuing Faculty Summer Grant: \$5000 USD (May - Aug 2017)
“Quasinormal Modes of Modified Gravity Black Holes”
- LMU Continuing Faculty Summer Grant: \$5000 USD (May - Aug 2015)
“Astrophysical Tests of GUP Modified Black Holes”
- Frank R. Seaver Science Research Fellowship: \$5000 (Jan - May 2014)
“Investigations in Lower Dimensional Black Holes”
- LMU Continuing Faculty Summer Grant: \$5000 USD (May - Aug 2013)
“Phenomenology of Lower Dimensional Black Holes”
- LMU Continuing Faculty Summer Grant: \$5000 USD (May - Aug 2011)
“Cosmological Implications of Primordial Black Holes in the Vanishing Dimensions Framework”
- Frank R. Seaver Science Research Fellowship (Sep - Dec 2009)
“Void Scaling and Lacunarity of Large Scale Cosmological Structure”
- LMU Continuing Faculty Summer Grant: \$5000 USD (May - Aug 2009)
“Constraining unparticle physics with fundamental laws”
- LMU New Faculty Summer Grant: \$4000 USD (May - Aug 2005)
“Climate Effects on Aerodynamic Enhancement of Short Sprint Races”
- LMU New Faculty Start-Up Grant: \$20,000 USD (Sep 2004 - Aug 2006)

Visiting Activity

- Frankfurt Institute for Advanced Studies, Frankfurt, Germany (July 2022; Jul 2017; Jul 2015; July 2013; May 2012)
- Department of Physics and Astronomy, University of Bologna, Italy (May 2022; May 2019; March 2018)
- School of Physics and Astronomy, Queen Mary, University of London, UK (May 2019; March 2018; May 2016; May 2014)
- Max Planck Institute for Radio Astronomy, Bonn, Germany (March 2018)
- Perimeter Institute for Theoretical Physics, Waterloo, ON (Feb 2017; Feb 2015; Mar 2014; Nov 2013; Jun 2012; Sep 2010; Nov 2007)
- University of Trieste, Department of Physics, Trieste, Italy (May-Jun 2011)
- University of Waterloo Department of Physics and Astronomy, Waterloo, ON, Canada (Mar 2010)
- LIGO Laboratory, Caltech, Pasadena, CA (Oct - Dec 2009)
- Moore Center for Theoretical Physics and Cosmology, Caltech, Pasadena, CA (Jul 2009)

Professional Memberships

- American Physical Society / Division of Gravitational Physics
- Canadian Association of Physicists / Division of Theoretical Physics
- International Society on General Relativity and Gravitation
- International Society for Quantum Gravity
- European Cooperation in Science and Technology (COST) Action CANTATA

Select External Academic / Professional Service

- Associate Editor, Canadian Journal of Physics (May 2022 – May 2027)
- Session Chair and “Best Student Talk” Competition Judge, *Atlantic General Relativity Meeting*, Bishop’s University, QC, Canada (26-29 May 2021)
- International Scientific Committee, *3rd Fields and Gravity (FLAG) Meeting*, Catania, Italy (13-15 June 2019)
- Co-Organizer, *Black Holes and Alternatives 2018*, Max Planck Institute for Radio Astronomy, Bonn, Germany (14 March 2018)
- Co-Organizer, *Third Karl Schwarzschild Meeting on Gravitation Physics*, Frankfurt Institute for Advanced Studies, Frankfurt, Germany (24-28 July 2017)
- Co-Organizer, *Second Karl Schwarzschild Meeting on Gravitation Physics*, Frankfurt Institute for Advanced Studies, Frankfurt, Germany (20-24 July 2015)
- Co-Organizer, *First Karl Schwarzschild Meeting on Gravitation Physics*, Frankfurt Institute for Advanced Studies, Frankfurt, Germany (22-26 July 2013)
- Session Chair, Quantum Gravity and Quantum Cosmology, *Congress of the Canadian Association of Physicists*, Montréal, QC (May 2013)
- Advisory Committee, *2010 Anacapa Society West Coast Workshop*, Pomona, CA (December 2010)
- Journal Referee: *Physics Letters B*, *Classical and Quantum Gravity*, *Journal of High Energy Physics*, *Journal of Cosmology and Astroparticle Physics*, *General Relativity and Gravitation*, *Annals of Physics*, *American Journal of Physics*, *Canadian Journal of Physics*, *Physica A*, *Europhysics Letters*, *European Physical Journal C*, *European Physical Journal Plus*, *Communications in Theoretical Physics*, *International Journal of Modern Physics A*, *International Journal of Modern Physics D*, *Advances in High Energy Physics*, *Chaos, Entropy*, *International Journal of Physics C*, *Russian Gravitational Society: Gravitation and Cosmology*, *Kuwait Journal of Science*, *Journal of Sports Sciences*, *Journal of Biomechanics*, *Journal of Mathematical Imaging and Vision*, *Computers and Electronics in Agriculture*, *The Visual Computer*, *Music Perception*, *The Art Bulletin*
- Grant Agency Reviewer: *Natural Sciences and Engineering Research Council of Canada (NSERC)*; *Research Corporation for Science Advancement*; *European Cooperation for Science and Technology (COST)*; *Health Research Council of New Zealand*; *FONDECYT Program: Astronomy, Cosmology, and Particles*, Ministry of Education, Government of Chile
- Book Reviewer: *Cambridge University Press*; *Nature Publishing Group*, *Addison-Wesley Co.*; *AIP Publishing*, *University Science Books*
- Consultant: *EM:RAP Podcast*; *Shabam! podcast*; *The Particle Zoo LLC*; *Higher Mammals Productions*; *Athletics Canada*