Unruh Acceleration Radiation, Vacuum Entanglement and Relativity

Virtual Meeting on Zoom  December 8-10, 2020

Acceleration radiation is one of the cornerstones of quantum field theory in curved space-time. Almost half a century after the seminal works of Moore, Fulling, Hawking, and Unruh about the interconnection of gravity, acceleration, and radiation, this topic still intrigues us. In particular, there has been ongoing research using quantum optical techniques to study Unruh/Hawking like radiation; e.g. it has been shown that the radiation emitted by atoms falling into a black hole looks like, but is different from, Hawking radiation.

Organizers: Marlan Scully (Texas A&M University, Baylor University, Princeton University)
William Unruh (Texas A&M University and University of British Columbia)

Committee:
Arash Azizi, Texas A&M University
Michael Duff, Imperial College of London
Stephen A. Fulling, Texas A&M University
Christopher N. Pope, Texas A&M University and Cambridge University
Anatoly Svidzinsky, Texas A&M University

Speakers:
Atsushi Higuchi, University of York
Eduardo Martin-Martinez, University of Waterloo
George Matsas, São Paulo State University
Franco Nori, University of Michigan, Riken
Carlos Ordóñez, University of Houston
Gary Rozenman, Tel Aviv University
Salvatore Savasta, University of Messina
Wolfgang Schleich, University of Ulm
Jeff Steinhauer, Technion – Israel Institute of Technology
Freyja Ullinger, Ulm University
Robert Wald, The University of Chicago
Silke Weinfurtner, University of Nottingham