

Lemaître Workshop 2024

Black Holes, Gravitational Waves and Space-Time Singularities

Second international conference to celebrate the legacy of G. Lemaître



Vatican Observatory

Castel Gandolfo, Italy

17 - 21 June 2024



SCIENTIFIC RATIONALE

Building upon the success of the inaugural Lemaître workshop, we delve deeper into the legacy of Mgr. Georges Lemaître's profound insights. This iteration focuses on addressing paramount themes: Cosmology and the perplexing Hubble tension, the enigmatic nature of spacetime singularities encompassing the Big Bang and Black Holes, the Gravitational Waves they produce, the tantalizing pursuit of Quantum Gravity and its connections with the Entanglement and foundations of Quantum Theory. At the heart of our endeavor lies a central query: Could these seemingly distinct puzzles be interconnected in ways that illuminate the fabric of our Universe? The main goal of this workshop is to encourage interaction among the participants, between theory and observation, and to provide a stimulating and thought-provoking environment for new ideas. Through this interdisciplinary exploration, the conference seeks to illuminate the intricate interplay of these themes, pondering whether Lemaître's pioneering perspectives can enlighten a unified understanding of our cosmos.

SPEAKERS INCLUDE

Roberto Casadio, Michele Cicoli, Thibault Damour, Lajos Diosi, Ruth Durrer, Gia Dvali, Wendy Freedman, Lavinia Heisenberg, Thomas Hertog, Ted Jacobson, Alexander Kamenshchik, Claus Kiefer, Dominique Lambert, Andrei Linde, Renate Loll, Hiroshi Ooguri, Roger Penrose, Eric Poisson, Adam Riess, Mairi Sakellariadou, Misao Sasaki, Joseph Silk, Alexei Starobinsky, Daniel Sudarsky, Gerard 't Hooft*, Michael Turner, William Unruh, Cumrun Vafa*, Gabriele Veneziano, Licia Verde

* to be confirmed

CONTACT: Gabriele GIONTI, S.J.
Specola Vaticana
V-00120 Vatican City State - Rome, Italy
Tel.: +39 06 69863250
e-mail: ggionti@specola.va

SCIENTIFIC ORGANIZING COMMITTEE

Massimo Bianchi, Sergio Cacciatori, Guy Consolmagno, S.J., Viviana Fafone, Matteo Galaverni, Gabriele Gionti, S.J., Renata Kallosh, Renate Loll, Maria Elena Monzani, Piergiorgio Picozza, Fabio Scardigli, Daniel Sudarsky, Michael Turner



Georges Lemaître