

# Black Holes, Spacetime Singularities and Gravitational Waves

An international workshop to celebrate the legacy of G. Lemaitre in the new millennium

**Vatican Observatory**  
Castel Gandolfo, Roma

**9 - 12**  
**May 2017**



## Scientific Rationale

The recent detection of gravitational waves has opened a new window in our understanding of the Universe, and it has also excited new speculations on the true nature of the singularities that signal the breakdown of the classical description of the spacetime at the beginning of the universe and at the endpoint of gravitational collapse.

What are the limits of modern scientific cosmology?

What are the real scientific challenges that can be explored in the near future?

The main goal of this workshop is to encourage interaction between the participants coming from different extraction (theory and observation), and to provide stimulating and thought-provoking environments for new ideas.

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**SCIENTIFIC ORGANIZING COMMITTEE:**

Vincenzo Antonuccio, Stefano Bellucci, Alfio Bonanno, Guy Consolmagno, S.J., Astrid Eichhorn, Gabriele Gionti, S.J., Chris Impey, Renata Kallosh, Carlo Rovelli, Fabio Scardigli, Joseph Silk, Daniel Sudarsky

## PRELIMINARY LIST of SPEAKERS

Alessandra Buonanno

Gia Dvali

Astrid Eichhorn

George Ellis

Alex Filippenko

Renata Kallosh

Helge Kragh

Andrei Linde

Feryal Özel

Roger Penrose

Giovanni A. Prodi

Joe Silk

Gerard 't Hooft

Gabriele Veneziano

Francesca Vidotto

