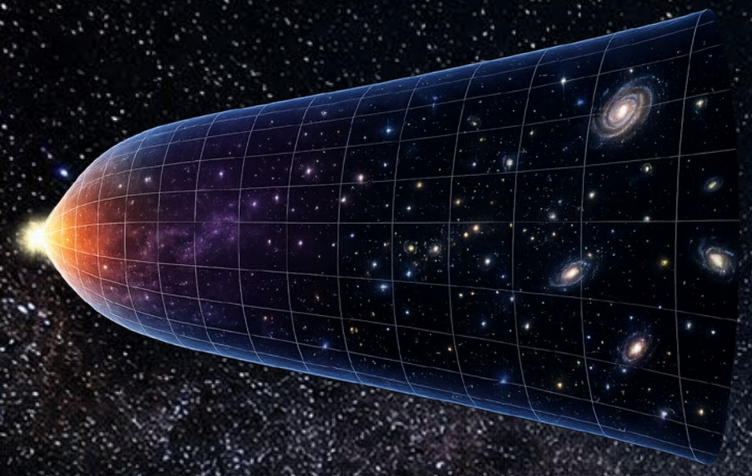

Lemaître Focus Meeting 2027

Cosmology 100 Years After Lemaître's Expanding Universe: Open Questions and New Frontiers

11 - 12 August 2027

ABSTRACT

In 1927 Georges Lemaître first established the linear relation between recession velocity and distance, marking the theoretical discovery of the expansion of the Universe. The 2027 Lemaître Focus Meeting will commemorate the centenary of this achievement while addressing some of the most pressing open questions in modern cosmology: the Hubble tension, the nature of black holes and spacetime singularities, the role of gravitational waves as cosmological probes, and the status of inflation.
By bringing together observational cosmology, gravitational-wave astronomy, black-hole physics, and quantum-gravity theory, the Focus Meeting will provide a unique interdisciplinary forum to assess how forthcoming observations and theoretical advances can jointly test the limits of the standard cosmological model. Its focused aim is to foster productive interaction between theory and observation and to identify concrete pathways toward resolving outstanding fundamental questions in the spirit of Lemaître's legacy.

INFO

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KEY TOPICS

1. The legacy of Georges Lemaître: historical overview
2. The legacy of Georges Lemaître: impact on modern cosmology
3. Cosmic expansion and the Hubble tension: observational perspective
4. Cosmic expansion and the Hubble tension: theoretical perspective
5. Space-time singularities and quantum gravity: future probes
6. Space-time singularities and quantum gravity: theoretical perspective

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