



COLLOQUIA DI DOTTORATO, A.A. 2024/2025

A101, Dipartimento di Fisica
Giovedì 22 maggio 2025 ore 16:00

The wonders of the Universe: a guided tour

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Looking at the starry sky, several questions come to our mind, such as "What is the Universe made of?", "How was it created?", "What, if anything, happened before the Big Bang?", "How does the Universe evolve and what is its ultimate fate?". To address these puzzling questions, we need a blend of theoretical developments and observational data. This seminar will discuss the observational and experimental tools we have at our disposal, as well as the two pillars of theoretical physics, namely General Relativity and Quantum Mechanics. Our current understanding of the early universe will be discussed, and the need for a fundamental theory, dubbed Quantum Gravity, will be highlighted, in order to resolve the remaining open questions.

The seminar is in presence up to the maximum occupancy of the lecture hall.