Thesis Proposal for the Master's Degree in Physics

Title: Models of inflations

Abstract (max 10 lines):

The theory of inflation, which predicts a period of rapid expansion in the early Universe, has proven effective in explaining several aspects of cosmic evolution. However, the precise mechanisms underlying this inflationary phase remain uncertain. In the current era of precision cosmology, new experimental data offers insights that enable more detailed exploration of this epoch. This thesis investigates different models of cosmic inflation, evaluating their implications and assessing their suitability as descriptions of the early stages of the Universe. Furthermore, it explores both current and future tests of inflation, highlighting how new or refined data may improve our ability to differentiate among inflationary scenarios.

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Laboratory where the thesis is carried out:
Laboratorio di calcolo del gruppo di Fisica delle Particelle Elementari – Dipartimento di Fisica

Type of thesis:
research: theoretical