

Fundamental Physics from the Unexplored Universe

jeudi 10 novembre 2022 10:00 (1 heure)

Cosmic voids –vast regions of relatively empty space that prevail throughout the Universe –may hold new clues to some long-standing problems in cosmology, yet they have largely been neglected as a cosmological probe by the scientific community until recently. The current and next generation of large-scale structure surveys for the first time enable a rigorous statistical treatment of voids and open up a new window for the exploration of fundamental physics on supergalactic scales. In my talk I will summarize recent progress in unlocking this potential with dedicated efforts to analyze voids in simulations and extensive data sets from redshift surveys and provide an outlook for future applications on how to scrutinize cosmology, gravity, and neutrino physics from this new angle.

Orateur: HAMAUS, Nico