Cosmology 2025 @ Elba Island



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Is there a need to go beyond LCDM?

The LCDM model has ben challenged many times in the past decade, mainly by galaxy observations on small scales: from the abundance of satellites, to the distribution of dark matter within galaxies. In my talk I will first revise all these claims with the help of cosmological numerical simulations of galaxy formation from the NIHAO project. I will then discuss whether there is indeed an observational motivated need to abandon Cold Dark Matter and move beyond such a simple model.

References

Author: MACCIO, Andrea Valerio (New York University Abu Dhabi)

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