

Constraining Cosmological Parameters with Machine Learning: Application to eROSITA galaxy clusters

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Given the X-ray observations of galaxy clusters by eROSITA and the multi-cosmology simulations, one can compare their outcomes and constrain the cosmological parameters inversely via machine learning. The key point lies in understanding the simulations and observations from a probabilistic perspective. We are first to match the individual observed eROSITA galaxy cluster to the multi-hydro-cosmology simulations, aiming to constrain the cosmology parameters.

Author: ZHONG, Fucheng (Istituto Nazionale di Astrofisica (INAF))

Presenter: ZHONG, Fucheng (Istituto Nazionale di Astrofisica (INAF))

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