

Contributed Talk

Splinter eROSITA

GALAXY CLUSTERS AS COSMOLOGICAL PROBES: FROM
OBSERVATIONS TO PARAMETER CONSTRAINTS

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Using galaxy clusters to study the large-scale structure of the Universe counts among the main science drivers of the eROSITA all sky survey. It is notably expected to provide accurate and essential information on the behaviour of the Dark Energy as well as any other component that affects the build-up of cosmic structures - such as relic neutrinos. In this contribution, I will describe which cosmological information can be extracted from the study of galaxy clusters and how this can be achieved with X-ray selected cluster samples. Based on some examples based on past and on-going X-ray surveys, I will highlight some of the challenges that the eROSITA cosmological program will need to solve and possible ways forward.