

Contributed Talk

Splinter eROSITA

SUNYAEV-ZEL'DOVICH EFFECT GALAXY CLUSTER COSMOLOGY AND
IMPLICATIONS FOR EROSITA

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During the past decade the first successful Sunyaev-Zel'dovich effect (SZE) surveys for galaxy clusters have been carried out, delivering hundreds to thousands of new systems extending to the highest redshifts to which galaxy clusters have so far been detected. The cosmological analyses of these samples have delivered constraints competitive with the best other cosmological probes, but have also delivered lessons on the importance of cluster mass calibration, the importance of including selection effects and even the crucial role played by massive neutrinos in the cosmological interpretation of cluster samples. These samples have driven the development of new and improved analysis techniques that can now be applied to the eROSITA cluster sample. Moreover, the combination of SZE and X-ray constraints on large cluster samples opens the possibility of altogether new science.