ID contributo: **46** Tipo: **non specificato**

The $Y_{500} - M_{500}$ scaling relation from the NIKA2 SZ Large Program

martedì 29 giugno 2021 14:00 (25 minuti)

The abundance of galaxy clusters in mass and redshift is a powerful cosmological probe, that enables the measurement of cosmological parameters in many parts of the electromagnetic spectrum. One of the key elements needed to perform the cosmological exploitation of a cluster survey is the relation between the survey observable and cluster masses. Among these observables, the integrated Compton parameter :math:Y is an observable of Sunyaev-Zeldovich (SZ) surveys, that tightly correlates with the thermal energy content of galaxy clusters, and therefore with their mass.

The relation between the Compton parameter and the mass within R_{500} is one of the goals of the NIKA2 SZ Large Program (LPSZ), also presented in this conference. In this talk, I will present ongoing studies to forecast the constraining power of this LPSZ, using mock simulated datasets that mimic the large program sample, selection function, and typical uncertainties on Y_{500} and M_{500} obtained for analyses of individual clusters.

Autore principale: KÉRUZORÉ, Florian (LPSC, Grenoble, France)

Relatore: KÉRUZORÉ, Florian (LPSC, Grenoble, France)