

Executive summary - Ariane Dekker

Probing sterile neutrinos and axion-like particles from the Galactic halo with eROSITA

What is this contribution about?

We search for decaying sterile neutrino and axionlike-particle signal from the Galactic halo with all-sky eROSITA survey.

Why is it relevant / interesting?

Sterile neutrinos and axion-like particles are well motivated dark matter candidates and their existence can be tested by X-ray telescopes such as eROSITA.

What have we done?

We simulate all-sky X-ray maps and test our model against mock data sets with background only.

What is the result?

We probe a large parameter space for both sterile neutrinos and axionlike-particles and improve on current limits.