Cosmology 2023 in Miramare



Contribution ID: 50 Type: not specified

Testing universal dark-matter caustic rings with galactic rotation curves

Tuesday 29 August 2023 22:00 (5 minutes)

Infall of cold dark matter on a galaxy may result in caustic rings where the particle density is enhanced. They may be searched for as features in the galactic rotation curves. Previous studies suggested the evidence for these caustic rings with universal, that is common for different galaxies, parameters. Here we test this hypothesis with a large independent set of rotation curves by means of an improved statistical method. No evidence for universal caustic rings is found in the new analysis.

Author: DAVYDOV, Daniil (Institute for Nuclear Research (INR) of the Russian Academy of Sciences)

Presenter: DAVYDOV, Daniil (Institute for Nuclear Research (INR) of the Russian Academy of Sciences)

Session Classification: Posters of tuesday (ignore time)