

Search for gamma-ray lines in the Galaxy with DAMPE

(executive summary)

What is this contribution about?

This work is about GeV gamma-ray line search with DAMPE photon data.

Why is it relevant / interesting?

GeV lines have better signal-to-background ratio and are difficult to produced in usual astrophysical environments, so they are among the favorables targets of DM indirect.

What have we done?

In this work, we use 5.0 years of DAMPE photon data to search for spectral lines from 10 GeV to 300 GeV.

What is the result?

No line signals or candidates are detected, we therefore present the 95% confidence level constraints on the annihilation cross section or decay lifetime with systematic uncertainties included.