

Topic: Searching for imprints of axion-like particles (ALPs) by studying spectral modulations of gamma-ray sources

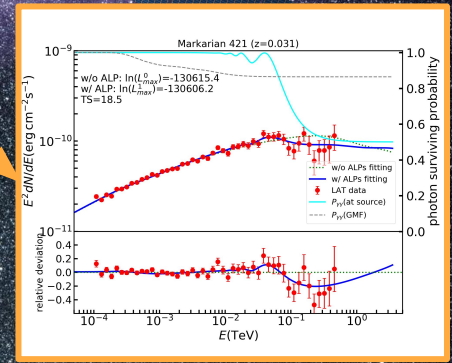
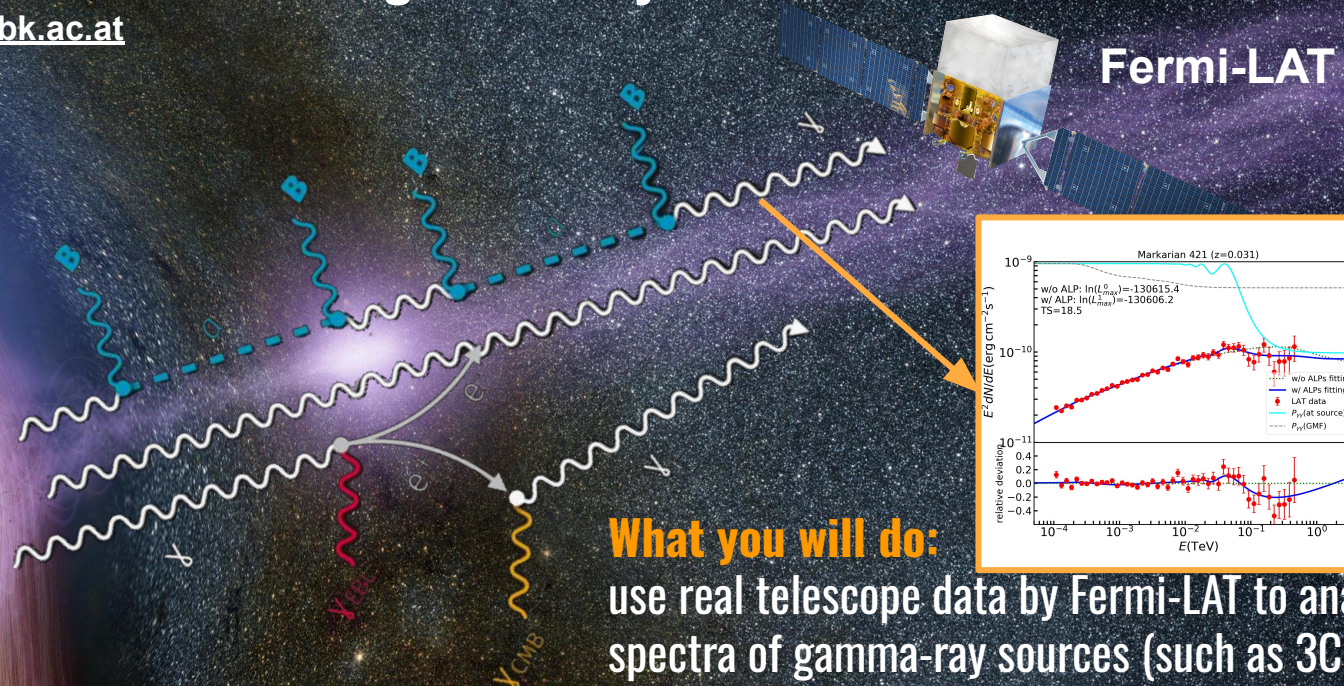
Qixin Yu, Email: qixin.yu@uibk.ac.at

 universität
innsbruck

Research Center Astrophysics
and Particle Physics

Topic background:

Axion-like particle is considered to be one of the most popular candidate for Dark Matter. They can modulate the gamma-ray spectrum by their mixing with photons...



What you will do:

use real telescope data by Fermi-LAT to analyze spectra of gamma-ray sources (such as 3C 66A, PG1553+113, etc...), and determine the significance of ALPs through model fitting.

Requirement:

python experience with data analysis.