

Analyzing the Fermi Bubbles with Dark Matter Particle Explorer

(executive summary)

- What is it about?

The analyses of the Fermi bubbles with DAMPE photon data.

- Why is it relevant?

This is the first analysis of diffuse emission with DAMPE data and it provides an independent observation of the Fermi bubbles from the Fermi-LAT.

- What have we done?

We use 4.8-yr DAMPE photon data to derive the spectrum of the Fermi bubbles and to search for the emission from the cocoon.

- What is the result?

We detect the emission from the Fermi bubbles in DAMPE data ($>18\sigma$) and find their average spectrum consistent with the previous results. The cocoon is not significantly found ($\sim 3\sigma$) in the data.

