## Future Science enabled by COSI: the Compton Spectrometer and Imager

Friday 14 October 2022 14:00 (30 minutes)

The Compton Spectrometer and Imager (COSI) is a soft gamma-ray telescope that was recently selected to be NASA's next SMEX mission with a launch in 2026. COSI has a unique combination of excellent spectral resolution and large instantaneous field of view (>25%-sky). The mission is designed to uncover the source of Galactic positrons, image diffuse emission from stellar nucleosynthesis, and perform polarization studies of gamma-ray bursts and compact objects. With unprecedented sensitivity in the MeV range, COSI is expected to provide advances in the time-domain and multimessenger astrophysics and reveal new classes of gamma-ray sources. In this presentation I will give an overview of the future studies enabled by COSI, emphasizing possible synergies and complementarities with *Fermi*'s science.

## Track

Future Missions/Instruments

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