Contribution ID: **411** Type: **Contributed talk**

NuSTAR broad-band X-ray observations and multi-wavelength investigations of Galactic TeV sources

Monday, 4 July 2022 18:15 (15 minutes)

We will report recent progress on the NuSTAR observations of a variety of Galactic TeV sources including PeVatron candidates. Given its sub-arcminute angular resolution and high sensitivity above 10 keV, NuSTAR's hard X-ray morphology and spectroscopy data allow us to probe sub-PeV electron populations through detecting synchrotron X-ray radiation. NuSTAR, along with other X-ray telescopes, play an important and complementary role to the ultra-high energy (> 100 TeV) gamma-ray telescopes. Our targets include 8 middle-aged pulsar wind nebulae, W50 lobes powered by the microquasar SS433, and a few other gamma-ray sources detected by HAWC, LHAASO and VERITAS. Combined with radio, GeV and TeV data, we aim to provide a complete, multi-wavelength view of the most energetic particle accelerators in our galaxy. In this presentation, we will review our observation campaign, highlight some key results and discuss our future plan of observing other sources such as Westerlund 2 and Cassiopeia A.

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Session Classification: Contributed Talks