
Contribution ID: **127** Type: **not specified**

# PeV particles and multi-messenger radiation from super-Eddington accreting Galactic compact objects

*Friday, 21 March 2025 16:40 (20 minutes)*

Extreme accretion goes hand to hand with strong winds and outflows.
In particular, winds are observed to reach mildly relativistic velocities and develop bubble structures in super-Eddington accreting stellar mass compact objects powering Ultra-Luminous X-ray Sources (ULXs).
I will present a model for particle acceleration and associated multi-messenger emission in the bubbles powered by ULXs.
I will particularly focus on the maximum energy available to protons in these systems and possible gamma-ray spectra.
I will eventually discuss an application of such a model in the context of SS 433, a Galactic source recently detected by LHAASO up to hundreds TeV.

## Summary

**Presenter:** PERETTI, Enrico

**Session Classification:** Friday Afternoon B