ATHENA and the Galactic interstellar medium

Antoine Gusdorf*[1]

[1]Laboratory for Studies of Radiation and Matter in Astrophysics (LERMA) – CNRS, Observatoire de Paris – 24 rue Lhomond - 75005 - Paris, France

Abstract

In this presentation on a subject that is not my speciality, I will present the advances that the ATHENA mission will potentially bring to the study of the Galactic interstellar medium. I will base my presentation on the supporting papers made public by the ATHENA community, focusing on topics of direct relevance to the french PCMI community. These include star formation and evolution, end points of stellar evolution, and most notably the astrophysics of supernova remnants and the interstellar medium. I will highlight the possibilities afforded by ATHENA in terms of multi-wavelength astrophysics through the combination of X-ray data with data obtained with telescopes distributed all over the electromagnetic spectrum, from low frequency radio observatories (e.g. SKA or its precursors) to gamma ray telescopes like CTA.

*Speaker