

## Approaches to characterize Astrophysical Noise Sources (PLATO WP115100)

*Tuesday 18 April 2023 09:00 (15 minutes)*

The goal of the PLATO WP 115100 “Astrophysical Noise Sources” is to understand the effects that astrophysical noise, in particular manifestations of stellar activity, has on the radial velocity follow-up of planet candidates discovered by PLATO, and to outline mitigation procedures.

I will present a possible approach informed by X-ray observations of stars, including the multi-year all-sky scans of the eROSITA mission. X-ray observations are a sensitive tool to quantify stellar activity, and can be used for a variety of exoplanetary considerations. I will show how repeated X-ray measurements (in this example originally collected to estimate atmospheric evaporation rates of exoplanets) can be used to identify magnetically quiet periods of stars that may be used to schedule particularly efficient radial velocity follow up campaigns.

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**Session Classification:** Contributed Talks (part 2)