Elbereth conference 2025



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A catalog of stellar magnetic fields for exoplanet radio emission predictions

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In the Solar system, planetary radio emission is strongly correlated to incident magnetic power (similar to the Poytning flux). To test this observational law in other stellar systems, and use it to determine interesting observation targets, we need to get an estimation of the stellar magnetic field of the host stars. Here, we work on the compilation of measures of stellar magnetic fields from the literature, to form a catalog, and from this catalog, we try to infer relations allowing us to estimate the magnetic field using other correlated stellar parameters.

Astrophysics Field

Stellar physics, star-planet interactions, exoplanet detection

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