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Using the Sun as Rosetta stone to study the properties of other solar-like systems

We present our new approach to characterize solar-like stars and their interaction with hosted exoplanets in analogy to the Sun-Earth system. Our investigation allows us to obtain not only a highly accurate characterization of the mother star, but also to study the impact of the star's rotational and activity history on the evolution of its exoplanets.

This information, coupled with

the precise age estimated by asteroseismology, allows determining how long an atmosphere of terrestrial type could resist to the action of stellar wind and the XUV flux enabling to directly quantify the portion of the atmosphere which could potentially be eroded.

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