



Contribution ID: 97

Type: **not specified**

On exoplanet habitability by merging asteroseismic and space climate tools

Thursday, 16 May 2024 14:36 (2 minutes)

We present our synergic strategy that merges the potential of asteroseismology with solar space climate techniques in order to characterize solar-like stars and their interaction with hosted exoplanets. The method is based on the use of seismic data obtained by the space missions TESS Transiting Exoplanet Survey Satellite, coupled with stellar activity estimates deduced from ground-based campaigns. Our investigation allows us to obtain not only a highly accurate characterization of the mother star but also to study the stellar wind action on its exoplanet. This information, coupled with the precise age estimation by asteroseismology determines how long an atmosphere could resist the action of stellar wind, directly quantifying the portion of the atmosphere that could be eroded.

Presenter: DI MAURO, Maria Pia (INAF-IAPS)

Session Classification: Poster Presentations