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## **The internal rotation of low-mass stars from solar and stellar seismology**

*Thursday, 8 July 2021 16:30 (20 minutes)*

In this talk I will briefly review the knowledge on angular momentum transport acquired from helio- and asteroseismology of low mass stars. I will discuss how rotation is determined from the seismic data, what results it has brought us for the Sun first, than other stars thanks to the space-based photometry missions. I will present the current shortcomings of the models, the various solutions (magnetic and hydrodynamic) that have been proposed to explain the discrepancies between stellar evolutionary models and seismic constraints, as well as the intrinsic link between rotation and the transport of light elements. I will explain how this link is also deeply tied to what we consider as “standard stellar evolution models”. I will also discuss what key features of the internal rotation profiles of stars measured from seismology can help us in trying to break the current stalemate in our description of angular momentum transport during the evolution of low-mass stars.

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