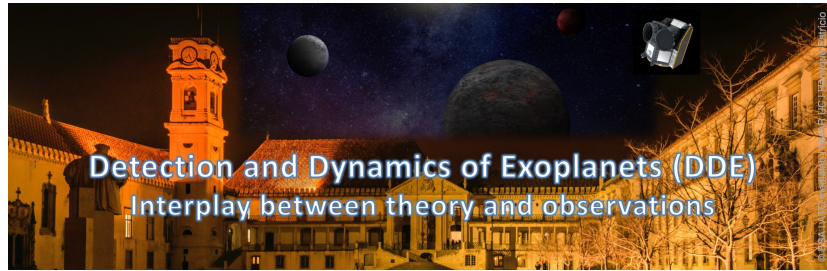


Detection and Dynamics of Exoplanets (DDE): Interplay between theory and observations



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Spectroscopic study of misaligned hot Jupiter KELT-7b

Tuesday 8 July 2025 11:45 (1 minute)

Interiors of hot stars are able to conserve their angular momentum for longer time, keeping rotational velocities high for whole lifetime. If there is a planet orbiting such star, its orbit may change significantly over time. The planet may become highly eccentric, misaligned with respect to the rotational axis of the star or even undergo tidally-induced precession. Up to date, only 4 exoplanets are confirmed to be nodally precessing, but their number may grow with more long-term observations. We present the analysis of spectroscopy of a hot Jupiter KELT-7b. Using its Doppler shadow, we provide updated values for its projected misalignment.

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Session Classification: Poster Session