

## Separating Periodic Orbital Radial Velocities from Spectral Shape Variation

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Searching for a periodic modulation in a time series of spectroscopic measurements poses many challenges. Even if periodicity is detected, one may also face the challenge of attributing it to the reflex motion of the star rather than other activity-related effects. In this talk, I will introduce new periodograms that can distinguish between Doppler shifts and spectral shape variability using partial distance correlation. The potential science cases include active planet-hosting stars on the one hand or binary systems with an intrinsically variable component on the other.

