Detecting reflected light from hot Jupiters at high spectral resolution

Jennifer Glover | Supervisor: Nicolas Cowan | Department of Physics, McGill

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Why?

Investigate albedo and cloud formation on exoplanets

Searches for biosignatures will rely on detecting reflected light with high resolution spectrographs

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Detecting reflected light at high spectral resolution is challenging!

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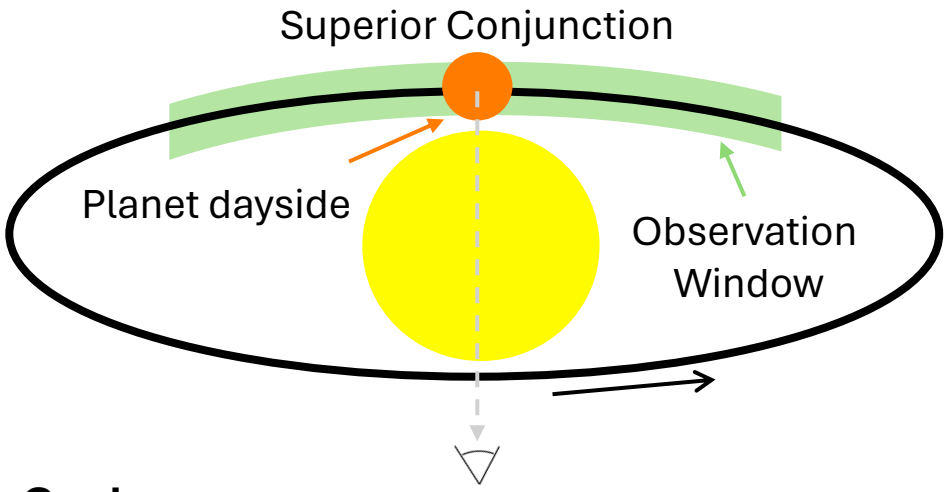

Goal:
Detect reflected light from hot Jupiter 51 Peg b

Data:
Approved observations with Maroon-X + archival

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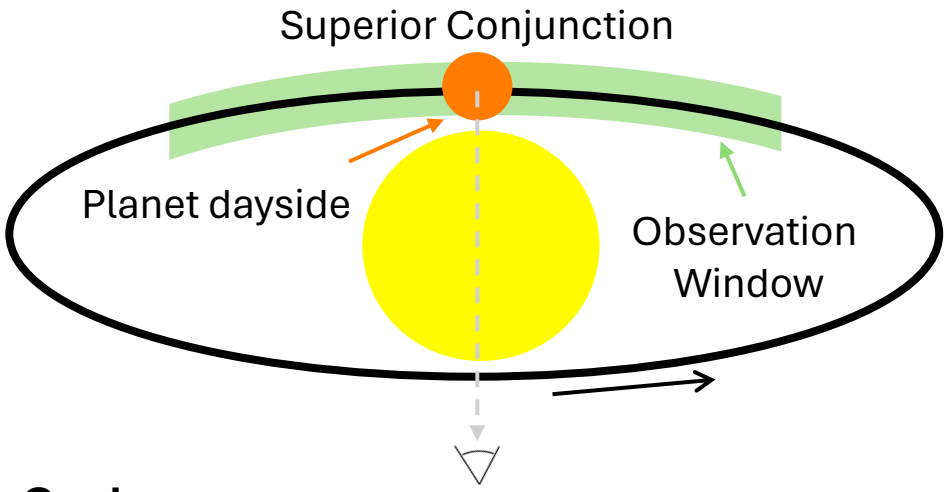

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Approach:
Use cross-correlation to extract the planet signal

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