



Contribution ID : 42

Type : **Poster**

Forecasting The Weather On Ultra-Hot Worlds: A High-Resolution Study of WASP-189b

Wednesday, 28 October 2026 14:15 (1)

Exceeding temperatures of up to 3,300K, WASP-189b's dayside hemisphere is a unique laboratory in which we can probe the extreme atmospheric conditions experienced by the population of ultra-hot Jupiter (UHJ) exoplanets. Using high-resolution observations from GHOST on Gemini South, we detect various metals within WASP-189b's atmosphere, alongside a first tentative detection of neutral potassium using the Doppler cross-correlation method. Our work details the exploration of using such detections to study atmospheric patterns on this planet, providing a first step toward forecasting global weather conditions.

Did you give a contributed talk at CASCA 2026?

No

If you are selected for a poster, would you be interested in giving a short flash talk on your work?

Yes

What is your career level?

Undergraduate

Which keyword describes the area of focus of this talk?

Exoplanets

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Session Classification : Exoplanets & Stars