



Search for star-planet interaction

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(Submitted on 29 Jul 2011)

We analyse the chromospheric activity of stars with extrasolar planets and search for a possible correlation between the equivalent width of the core of Ca II K line and orbital parameters of the planet. We found a statistically significant evidence that the equivalent width of the Ca II K line reversal, which originates in the stellar chromosphere depends on the orbital period P_{orb} of the exoplanet. Planets orbiting stars with $T_{\text{eff}} < 5500$ K and with $P_{\text{orb}} < 20$ days generally have much stronger emission than planets at similar temperatures but at longer orbital periods. $P_{\text{orb}}=20$ days marks a sudden change in behaviour, which might be associated with a qualitative change in the star-planet interaction.

Comments: 2 pages, 2 figures, to appear in the proceedings of IAU Symposium 282: "From Interacting Binaries to Exoplanets: Essential Modeling Tools "

Subjects: **Earth and Planetary Astrophysics (astro-ph.EP)**

Cite as: **arXiv:1107.5940 [astro-ph.EP]**
(or **arXiv:1107.5940v1 [astro-ph.EP]** for this version)

Submission history

From: Tereza Krejcová [[view email](#)]

[v1] Fri, 29 Jul 2011 11:35:32 GMT (26kb)

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