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Atmospheric signatures by transit of HD209458 with VLT/UVES

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In our search for clues as to the nature of the exosphere of HD209458 (Moutou et al., 2001 ; Moutou et al., 2003, Iro et al., 2004), we have acquired VLT/UVES data during an ambitious observational campaign performed in June-September 2002 and covering 5 transits of the exoplanet. The resolving power was R=100000 in the 0.475-0.68 micron range. We search for ions and neutral molecules (such as $H2O^+$, CO^+, CH^+, ...) originating in the planet's exosphere and located in the evaporated material around the planet, occulting its primary star. This study requires attentive reduction of the data and analysis. We will indicate our progress in investigating the spectra.

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