Short talk

COWAN CODE AND STARK BROADENING OF SPECTRAL LINES OF S II, S III AND S IV

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We present Stark broadening parameters (widths) of 5 multiplets of S II, 3 of S III and 4 of S IV calculated by using the modified semi-empirical approach (MSE). Needed atomic data (energy levels) have been calculated ab initio, using the Cowan code. Comparison of obtained for S II and S III, and taken from NIST atomic spectra database energy levels is given. We also present comparison of FWHM Stark widths calculated by using MSE and experimental widths.

Short talk

CORRELATION LINE-OF-SIGHT VELOCITY-METALLICITY IN A SAMPLE OF STARS WITH POSSIBLE PLANETARY SYSTEMS

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We examine the line-of-sight-velocity and matallicity data in a sample of 1039 stars from the solar neighbourhood which may have planetary systems like our own. A correlation between line-of-sight velocity and metallicity is found.