A Spectroscopic Abundance Study of Dwarf Cepheid V1719 Cygni

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Abstract

Spectroscopic CCD observations were carried out for V1719 Cygni and the spectrum in the visual region is analysed relative to the Sun with a line-blanketed convective model atmosphere. Adopted atmospheric parameters are : an effective temperature $\langle$ Teff $\rangle$ = 7000 K, a surface gravity log g = 3.4. Although our result is dependent on microturbulent velocity and damping constant, it was found that Mg in V1719 Cygni is nearly solar, or underabundant by 0.2 to 0.3 dex according to the analysis of 5172.684A Mg I line which is relatively free from blending. This is inconsistent with the previous photometric result where V1719 Cygni was known as an abnormally metal rich variable.