The short-period low-mass binary system CC Com revisited

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In this study we determined precise orbital and physical parameters of the very short period low-mass contact binary system CC Com. The parameters are obtained by analysis of the new CCD data with the archival spectroscopic data. The physical parameters of the components derived as $M_\textrm{c}$ = 0.717(14) $M_{\odot}$, $M_\textrm{h}$ = 0.378(8) $M_{\odot}$, $R_\textrm{c}$ = 0.708(12) $R_{\odot}$, $R_\textrm{h}$ = 0.530(10) $R_{\odot}$, $L_\textrm{c}$ = 0.138(12) $L_{\odot}$, $L_\textrm{h}$ = 0.085(7) $L_{\odot}$, and the distance of the system is estimated as 64(4) pc. The times of minima obtained in this study and with those published before enable us to calculate the mass transfer rate between the components which is 1.6×10^{-8} M$_{\odot}$yr^{-1}. Finally, we discuss the possible evolutionary scenario of CC Com.

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