

The thesis is focused on analysis of spectra and photometry of Be star 120 Tau. A period of 142,4 d was found in the spectroscopy data, which might be related to a binary character of this object. This period has to be confirmed by a set of new observations. Both positive and negative correlations were present in the color-color diagram of $U - B$ vs $B - V$. The explanation of this fact is the inclination of the rotational axis, which is near 60° . Spectral type, radius and an interval of possible rotational periods were also determined. Two more periods were found in the photometry data - 1,0375 d and 10,91 d. The shorter one is probably related to the rotation of the star. Other short periods listed in other works were not confirmed. The object's behavior is very complicated, more observations are needed to explain it.