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# Nonadiabatic analysis of strange-modes in hot massive stars with time-dependent convection

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## Abstract

Strange-modes have been so far investigated mainly in theory. They appear high luminosity star models with  $L/M > 10^4 L_{\odot}/M_{\odot}$  such as massive stars, Wolf-Rayet stars, helium stars, etc. In CoRoT observations, light curves of supergiant HD 50064 were found. After that, Aertset al. (2010) carried out a follow-up observation to the star. They suggest mode oscillation. In addition, they found that the mass-loss rate is changing in a timescale similar to changes in the photometric loss and strange-mode oscillations. So far strange-modes have been analyzed by the frozen-in convection approximation. In time-dependent convection in hot massive stars, we found that modes excited at the Fe bump are damped by convection. On the other hand, modes are weakened by convection, but it still remains in hot massive stars.

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