Non linear stability analysis of Wolf-Rayet stars

Sebastian Wende, Wolfgang Glatzel, Sonja Schuh

Institut für Astrophysik, Universität Göttingen

Numerical simulations of the evolution of strange-mode instabilities into the non-linear regime have been performed for a wide range of stellar parameters for Wolf-Rayet stars. It has been shown that the Wolf-Rayet models reach radial velocities which amount up to 30% of their escape velocity. The acoustic luminosities suggest a connection to the observed mass loss. Most of the models show a *jump* in the mean effective temperature after reaching the non-linear regime. This *jump* is related to the run of the opacity.