

SUBLUMINOUS O STARS

Uli Heber

Dr. Remeis-Sternwarte, Universität Erlangen-Nürnberg, Germany

Subluminous O and B stars are generally believed to be related to the extreme Horizontal Branch. While their present status seems to be well established, their origin remains unclear. The progenitor has to lose its envelope almost entirely at the same time as core helium burning is ignited at the tip of the RGB. Two rivaling scenarios are discussed to explain the origin of the sdO stars: i) The delayed core helium flash and ii) mergers of helium core white dwarfs. We discuss the results of quantitative spectroscopic analyses of sdO stars in the light of binary population synthesis as well as of non-Standard single star evolution scenario with strong mass loss.