

Massive binaries as progenitors for stellar explosions

Selma de Mink

Anton Pannenkoek Astronomical Institute, University of Amsterdam, 1090 GE Amsterdam,
The Netherlands

email: S.E.deMink@uva.nl

Abstract. The majority of young massive stars are found in close binary systems. Recently, dedicated observing campaigns have provided strong constraints on the binary fraction as well as the distribution of the parameters that characterize the binary systems: the masses of both components, the orbital period and eccentricities. Most strikingly these findings imply that the majority of massive stars experience strong interaction (roche lobe overflow, a common envelope phase and or a merger) with a binary companion before their final explosion. I will discuss recent results from detailed binary star models and population synthesis models.
