

CLASSIFICATION OF SUPERNOVAE AND THEIR RATES

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Classification of supernovae (SNe) includes different physical and phenomenological classes. Physically, there are two main classes of supernovae: SNe Ia representing the thermonuclear explosion of a white dwarf in a close binary system (CBs), and core-collapse SNe resulting in the gravitational collapse of massive stars. Stripped-envelope SNe Ib/c represent a particular class of core-collapse supernovae. They occur with stars stripped of their hydrogen/helium envelope in CBs and/or due to the strong stellar wind. We present the recently determined rates for different classes of SNe found in literature, and try to estimate the rates for stripped-envelope SNe, including hypernovae (SNe Id).