

The origin of Type Ia supernovae

Peter Lundqvist

Stockholm Observatory (Stockholm, Sweden)

The origin of Type Ia supernovae (SNe Ia) is still unknown. While it is widely accepted that they result from the explosion of a white dwarf in a binary system, we know very little about the nature of a companion star. To reveal the true nature of SNe Ia and make more stringent use of them in cosmology and for nucleosynthesis yields, we therefore need stringent methods to discriminate between possible progenitor scenarios. I will discuss some possible methods and what they have revealed.