

Five Supernova Survey Galaxies in the Southern Hemisphere: Supernova Ia Rates

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Based on the database with 56 SN events discovered in 3838 galaxies of the southern hemisphere, we compute the rate of supernovae (SNe) of different types along the Hubble sequence normalized to the optical and near-infrared (NIR) luminosities as well as to the stellar mass of the galaxies. We find that the rates of type Ia SN, show a dependence on both morphology and colors of the galaxies, and therefore, on the star-formation activity. The rate of SNe Ia can be explained by assuming that at least 15% of Ia events in spiral galaxies originates in relatively young stellar populations. We also find that the rates show no modulation with nuclear activity or environment.

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