Ultraviolet Extinction of a Few Supernova Remnants

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Supernova is one of the major contributors to interstellar dust, and the supernova-produced dust may be different from AGB stars due to its violent activity in the explosion. In order to understand the characteristics of supernova-produced dust, ultraviolet (UV) extinction is determined to a few supernova remnants which are optically very thin, because UV band is very sensitive to interstellar extinction and the UV band extinction is important to constrain the properties of sub-um-sized dust grains. In combination of the data from the UV photometric survey (GALEX) and from the optical spectroscopic surveys (RAVE and LAMOST), the extinction in the GALEX/NUV and GALEX/FUV bands relative to the selective extinction E(B-V) are determined to a few supernova remnants, which is compared with the average extinction over the entire sky. In addition, the relation of intrinsic stellar color indexes with the GALEX/NUV and GALEX/FUV bands are determined with stellar effective temperature. The dust model will be constructed to explain the derived UV extinction law.