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Preliminary results of analysis of Ia type events redshift distributions on data of the Open and Asiago Supernovae Catalogues

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The shape of redshift distribution for uniform sources set in our Metagalaxy defined by cosmological parameters and properties of space. The type Ia supernovae usually considered as a homogeneous subsample because of suggestion that these luminous events could be used as standard candles for cosmological measurements. This mention occurs since the earliest studies of supernovae in 1938. Firstly the parameters of our Metagalaxy Ω and Λ were determined due sample of Ia supernovae from the Supernova Cosmology Project analysis in 1998. It was found due SN1a characteristics investigation that space in our Metagalaxy is Euclidean at small redshifts and de-Sitter at high ones. Now several tens of thousand supernovae' characteristics analyzed in new catalogues. The preliminary results of the redshift distribution investigation for SNIa from the Asiago Supernova and Open Supernova Catalogues are discussed in this work. Firstly it was shown that several peculiarities are presented in Ia supernovae redshift distribution in both objects subsamples. The deviation in the band $0.015 < z < 0.13$ accordingly Open Supernova Catalogue (OSC) data contain more faint supernovae. Two peculiarities also were found in the region $0.25 < z < 0.45$ on data of this catalogue. One of it's contain more faint events, other contain more bright supernovae. The separated peculiarities and areas could not be explained due 2 groups of type Ia SNe explosions scenarios and dimming of flux due interaction of surrounding media. Thus such peculiarities presence could be caused by several unknown aspects of SNIa explosions scenarios or really changing of the parameters of our Metagalaxy. Further conclusions required subsequent OSC database treatment in combination with high redshift datasets, for example, addition of Dark Energy Survey Supernova Program catalogue into data analysis.

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