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# Systematics and Biases in Observations of Supernovae Associated with Gamma-Ray Bursts

*Tuesday, 9 July 2024 17:00 (22 minutes)*

Detection, observation, and description of supernovae associated with gamma-ray bursts are currently topical tasks in the field of transient phenomena. However, there is a certain pool of factors that can complicate or even make it impossible to identify a supernova in the light curve of a gamma-ray burst. And even if a supernova signature has been detected, further steps to determine its parameters can introduce their own uncertainties and systematic errors, which can affect the quality, for example, of the supernova light curve and the determination of its parameters. In this talk, we will discuss the selective effects influencing the possibility of detecting a supernova associated with a gamma-ray burst and estimating its parameters. We will also discuss possible options for their consideration and minimisation. It can contribute to increasing the statistics of detected supernovae with gamma-ray bursts and help approach the answer to questions such as "*Why aren't all long GRBs accompanied by SNe?*" and "*Do SN-GRBs and type SN Ic belong to the same general sample?*".

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