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Electromagnetic observations of supernovae for gravitational wave searches

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Electromagnetic observations of core collapse supernovae (CCSNe) provide a wealth of information about the explosion mechanisms and trigger the searches for the possible associated gravitational wave emission. CCSNe with distances that are less than approximatively 30 Mpc are candidate targets for the LIGO/Virgo/KAGRA searches during the ongoing observing run. Supernovae are routinely monitored by the astronomical community, including all sky surveys. Photometric light curves in different bands allow to narrow the time interval where to search for possible gravitational wave transients.

The light curves for some case studies will be presented, together with the estimates of the progenitor mass. The issues related to the distance of the host galaxies will also be discussed.

Primary author: Prof. POGGIANI, Rosa (University of Pisa)Presenter: Prof. POGGIANI, Rosa (University of Pisa)Session Classification: Electromagnetic