

# The joint search for gravitational wave and low energy neutrino signals from core-collapse supernovae. Current status and future plans.

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One of the possible scenarios of the multimessenger astronomical studies is the joint search for gravitational wave and low energy neutrino signals from core-collapse supernovae. This activity is pushing forward by the intercollaboration community called the GWNUGroup. The network includes six neutrino detectors and three gravitational wave observatories. The research is based on two principle approaches. They are an offline analysis of the shared archival data and the online or low-latency alarm system. For the moment the former has been continued since the end of 2014, the latter is under preparation and can be realized within the framework of the SNEWS 2.0 system. Aspects of both approaches are reviewed in the report. In particular, general requirements, common software, data formats, selection and coincidence search algorithms are described briefly. The possibilities of source localization in the sky and determination the distance to the collapsed star are discussed.

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