

## Search for Supernova Neutrinos with the LVD Experiment

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The Large Volume Detector (LVD) is continuously taking data since 1992 at the INFN Gran Sasso National Laboratory (Italy). The experiment, 1 kton of liquid scintillator organized in 840 counters, is sensitive in the neutrino channels to burst expected from a gravitational stellar collapse. Full detection probability is foreseen in the case of an unexpected event in the Milky Way,  $d < 25$  kpc. At greater distances, up to 60 kpc, the trigger efficiency is limited but always better than 50%.

We have searched, both in on-line and off-line mode, for impulsed neutrino signals in LVD data collected in 26 years of operations. No evidence of such a signal has been found either in standalone mode or in coincidence with other neutrino detectors. The 90% c.l. upper limit on the rate of core collapse and failed supernova explosions out to distances of 25 kpc is found to be 0.09 event/year.

Methods and results of this analysis will be here discussed.

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