

## Supernova neutrino detection with XLZD and the limitations therein

In this talk I would discuss the potential detection sensitivity of XLZD towards supernova neutrino  $CE\nu NS$ . In addition, I would also talk on the limitations, to this detection, caused by charged current (CC) interaction of the supernova neutrinos. I would try to show that the CC interaction may in fact present a lower limit in the supernova distance that a large xenon detector can be sensitive to, without being blinded by the high energy electrons produced in the CC interactions.

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