

## SOLAR NEUTRINO CAPTURE CROSS-SECTION FOR Ge-76 NUCLEI

In GERDA and LEGEND experiments, a solar neutrino absorption by Ge-76 isotope induces a background event which is indistinguishable from beta decay signal. We estimate cross sections for solar neutrino capture by Ge-76 nucleus for various excited states of daughter nucleus As-76. The Gamow-Teller transitions to the low-lying excited states and the Fermi transitions to the resonance states of this nucleus were taken into account. We demonstrate that these resonant excitations couldn't be neglected for calculating the interaction cross-section. Influence of these resonances enhances total count of neutrino-induced events by  $\sim 40\%$ .

### Session and Location

Monday Session, Poster Wall #58 (Auditorium Gallery Right)

### Poster included in proceedings:

yes

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**Track Classification:** Poster (participating in poster prize competition)