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P3.076 Low energy ^8B solar neutrinos with the wideband intelligent trigger at Super-Kamiokande

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The water Cherenkov experiment Super-Kamiokande (SK) has accumulated a sample of $\sim 90\text{k}$ solar neutrino data in the past two decades. Currently, the detector measures recoil electrons from solar ^8B neutrino-electron scattering above a kinetic energy of ~ 3.5 MeV, limited by the capacity of the software trigger, although electrons as low as 2.5 MeV can be reconstructed.

The next frontier for the low energy program at Super-K is the current operation of the Wideband Intelligent Trigger (WIT) to push the trigger threshold to the event reconstruction limit of 2.5 MeV. This opens up the possibility to explore the lower energy edge of the Mikheyev-Smirnov-Wolfenstein (MSW) effect in the sun.

In this work we will present the preliminary analysis of the WIT data taken so far as well as future prospects.