

## Feasibility of detecting $8\text{B}$ solar neutrinos at JUNO

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In this talk we describe in detail the feasibility of detecting  $8\text{B}$  solar neutrino at JUNO with three reaction channels (neutrino-electron elastic scattering, neutrino- $^{13}\text{C}$  charged current, and neutral current interactions). A reduced 2 MeV threshold on the recoil electron energy is achievable with optimized background reduction strategies. The advantage of JUNO for charge and neutral current channel detection is a large amount of  $^{13}\text{C}$  ( $\sim 0.2$  kt). With ten years of data taking, about 60,000 ES signals and 600 NC/CC signal are expected. This leads to a simultaneous measurement of  $\sin^2\theta_{12}$  and  $\Delta m_{21}^2$  using reactor antineutrinos and solar neutrinos in the JUNO detector.

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