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JUNO: a Multipurpose Observatory for Neutrino Physics

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The Jiangmen Underground Neutrino Observatory (JUNO) is a 20 kton liquid scintillator detector that will study reactor antineutrinos emitted from two nuclear power plants in the south of China at a baseline of about 53km. With an unprecedented energy resolution, JUNO will be able to determine the neutrino mass ordering at 3-4 sigma significance within six years of running. JUNO will also be able to measure three out of the six oscillation parameters to an accuracy better than 1%, and to study neutrinos from various terrestrial and extra-terrestrial sources. The experiment is currently under construction, and data-taking is expected to begin by 2020. JUNO's physics program and status will be reviewed in this talk.

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