

Progress of nuclear astrophysics and underground project in China

Friday, 30 June 2017 09:55 (25 minutes)

Jinping Underground laboratory for Nuclear Astrophysics (JUNA) project takes the advantage of the ultra-low background of CJPL lab, high current accelerator and highly sensitive detectors to directly measure a number of crucial reactions occurring at their relevant astrophysical energies. In current phase, JUNA aims at the direct measurements of $^{25}\text{Mg}(p,\gamma)^{26}\text{Al}$, $^{19}\text{F}(p,\alpha)^{16}\text{O}$, $^{13}\text{C}(\alpha,n)^{16}\text{O}$ and $^{12}\text{C}(\alpha,\gamma)^{16}\text{O}$ reactions. The progress, including experimental setup, accelerator system, detector development, and low background test, will be presented.

Presenter: LIU, Weiping

Session Classification: Session 11 (Chair: T. Ahn)