

Abstract Submitted
for the APR16 Meeting of
The American Physical Society

The Search for High Mass WIMPs with the SuperCDMS Experiment HANG QIU, Southern Methodist Univ, SUPERCDMS COLLABORATION
— About 26.8% of the universe mass is contributed from dark matter. Weakly Interacting Massive Particle(WIMP) is currently the most promising dark matter candidate. SuperCDMS is one of the leading direct dark matter detection experiments around the world. Its biggest goal is to use semiconductor detectors under the cryogenic condition to detect WIMPs. Both ionization and phonon signals are read out via our detector sensors during the operation periods. The high threshold analysis aims to search for high mass WIMPs based on the data collected in a 2-year-long period of time from the SuperCDMS experiment setup located at the Soudan mine in Minnesota. In today's presentation, I am going to talk about the approaches towards this goal.

Hang Qiu
Southern Methodist Univ

Date submitted: 08 Jan 2016

Electronic form version 1.4