

## Overview of recent progress in PandaX experiment

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PandaX ( Particle and Astrophysical Xenon experiment), a large-scale liquid xenon dark matter detection project located at the China Jinping Underground Laboratory, has provided a high-sensitivity experimental platform for dark matter searches through the iterative development of three generations of detectors since its launch in 2009. It adopts the two-phase xenon time projection chamber technology, using xenon atoms as the detection target, and achieves detection by capturing the scintillation light and ionization signals generated by the collision between dark matter particles and xenon atoms. This report focuses on the recent progress in dark matter and neutrino physics searches with the PandaX-4T experiment as well as the development of the next-generation 20-ton liquid xenon experiment.

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