

GPU Application in JUNO

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The Jiangmen Underground Neutrino Observatory(JUNO) in China is a 20 kton liquid scintillator detector, designed primarily to determine the neutrino mass hierarchy, as well as to study various neutrino physics topics. Its core part consists of $O(10^4)$ Photomultiplier Tubes (PMTs).

Event reconstruction based on this large amount of PMTs will cost a lot of time, GPU parallel computing is perfectly suitable for solving this issue. It could also be utilized in Monte Carlo Simulations, Deep Learning and many other aspects of the experiment. This talk will show a few examples of GPU application in JUNO and demonstrate its huge potential for experiments with lots of PMTs.

Primary author: 罗武鸣 (高能所)

Presenter: 罗武鸣 (高能所)

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