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The Monte-Carlo Environment for the STAR High Level Trigger HONGWEI KE, HAO QIU, XIANGMING SUN, THE STAR COLLABORATION — The STAR High Level Trigger (HLT) is implemented in order to select events of interest in real time by tracking events online. In year 2010, the HLT has successfully selected the events with high pT charged particles, di-electron and light nuclei with charge=2. In this talk, we will report the preliminary results of Monte-Carlo simulations for the environment of the STAR HLT. The simulations include application of GPU for secondary vertex finding and the HLT tracking efficiency. The HLT's performance and its scalability will also be discussed.

Hongwei Ke

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