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Hadrons from a Multi-Phase Transport Model

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The goal of a multi-phase transport (AMPT) model is to provide a kinetic theory description of all essential stages of relativistic nuclear collisions. Here I will first introduce the AMPT model including its structure and selected earlier results. I will then discuss the recent puzzle on baryon stopping from RHIC, which affects the yield and rapidity distributions of net-baryons. Finally, I will show new results of p+O collisions from AMPT at energies relevant to LHAASO, including the rapidity distributions of various hadrons and the effect of baryon stopping modeling on protons at large rapidities.

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