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Strange Particle Production in ALICE at the LHC DONIELLE MILLER, TRAVANTE THOMPSON, EDMUNDO GARCIA-SOLIS, AUSTIN HARTON, Chicago State University, ALICE COLLABORATION — Heavy Ion collisions at ultra-relativistic energies produce a very hot, dense medium known as Quark Gluon Plasma (QGP). Hard parton (quarks and gluons) scattering occurring during these collisions generates high momentum partons that traverse the QGP which then fragment into sprays of particles called jets. The production of jets composed of strange particles can be useful in gaining insight into the nature of the QGP medium. Additionally, strange particle generation provides useful information about parton fragmentation. Our research at the LHC focuses on strange particles and strange particle jets that occur during proton-proton and lead-lead collisions. In this presentation, the ALICE experiment will be discussed, strange particles and strange jets will be examined and the proposed techniques for analyzing collision data will be presented. This material is based on work supported by the National Science Foundation under grants PHYS- 1613118 and PHY-1719759.

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