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Strangeness Production in Jets with ALICE at the LHC CHRIS-MOND SMITH, AUSTIN HARTON, EDMUNDO GARCIA, Chicago State University, ALICE COLLABORATION — The study of strange particle production is an important tool for understanding the properties of the hot and dense QCD medium created in heavy-ion collisions at ultra-relativistic energies. The study of strange particles in these collisions provides information on parton fragmentation, a fundamental QCD process. While measurements at low and intermediate p_T , are already in progress at the LHC, the study of high momentum observables is equally important for a complete understanding of the QCD matter, this can be achieved by studying jet interactions. We propose the measurement of the characteristics of the jets containing strange particles. Starting with proton-proton collisions, we have calculated the inclusive p_T^{Jet} spectra and the spectra for jets containing strange particles (K-short or lambda), and we are extending this analysis to lead-lead collisions. In this talk the ALICE experiment will be described, the methodology used for the data analysis and the available results will be discussed. This material is based upon work supported by the National Science Foundation under grants PHY-1305280 and PHY-1407051.

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