

Abstract Submitted
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A study of lambda baryon production in $\sqrt{s_{NN}}=200$ GeV Au+Au and $p+p$ collisions at PHENIX DILLON ROACH, Vanderbilt University, PHENIX COLLABORATION — The lambda baryon is particularly useful in our study of the properties of the quark-gluon plasma (QGP). As a baryon, the lambda will allow us to refine our understanding of hadronization mechanisms. Additionally, the strangeness content of the lambda baryon makes it an excellent probe of the relative differences in strange quark production observed in Au+Au and $p+p$ collisions. We present the lambda baryon spectra as a function of transverse momentum p_T and centrality class for $\sqrt{s_{NN}}=200$ GeV Au+Au collisions and for $\sqrt{s_{NN}}=200$ GeV $p+p$ collisions, as well as how they relate to one another. In Au+Au collisions we report spectra for $1 \text{ GeV}/c < p_T < 8 \text{ GeV}/c$ as a function of centrality and in $p+p$ collisions we report spectra for $1 \text{ GeV}/c < p_T < 3.5 \text{ GeV}/c$. Comparisons to STAR data as well as models of hadronization and strangeness enhancement will be discussed.

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