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**Proton Spectra of Fixed-Target Au + Au  $\sqrt{s_{NN}} = 4.5$  GeV collisions** SAMUEL HEPPELMANN, UC Davis, STAR COLLABORATION — In this talk, results are presented from the fixed-target (FXT) run at STAR which is an extension of the RHIC beam energy scan (BES). The BES program was proposed to look for turn-off signatures of the quark-gluon plasma and search for a possible QCD critical point. We shall present the FXT study of Au + Au collisions at  $\sqrt{s_{NN}} = 4.5$  GeV. An overview of particle identification for proton spectra is discussed. The details of several analysis techniques are presented including detector performance and background corrections for FXT in STAR. The results demonstrate that STAR has a good particle identification and event reconstruction in the fixed-target configuration.

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