¹ Measurement of inclusive production of ² fully-reconstructed jets in Au+Au collisions at ³ $\sqrt{s_{\rm NN}} = 200$ GeV by the STAR experiment

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Robert Licenik (for the STAR Collaboration)

Nuclear Physics Institute, Czech Academy of Sciences

The STAR Collaboration reports progress towards the first inclusive mea-5 surement of fully-reconstructed jets in Au+Au collisions at $\sqrt{s_{\rm NN}} = 200$ GeV at RHIC. This analysis utilizes a dataset recorded in 2014 using a High Tower trig-7 ger, corresponding to an integrated luminosity of 5.2 nb^{-1} . This trigger requires 8 at least ~ 4 GeV energy deposited in one Barrel Electromagnetic Calorime-9 ter (BEMC) tower. Jets are reconstructed using charged-particle tracks in the 10 Time Projection Chamber and neutral energy measured by the BEMC with 11 $p_{\rm T}$ ($E_{\rm T}$) > 0.2 GeV/c (GeV), via the anti- $k_{\rm T}$ algorithm with resolution param-12 eters R = 0.2, 0.3, and 0.4. The large background yield in heavy ion collisions 13 is suppressed by requiring a high- $p_{\rm T}$ leading charged or neutral constituent in 14 accepted jet candidates. The bias imposed by this requirement is assessed and 15 the unbiased region is identified. Fully-reconstructed inclusive jet distributions 16 are reported in central (0-10%) and peripheral (60-80%) Au+Au collisions, and 17 corrections for background fluctuations and detector effects are discussed. 18