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Strangelet Search at RHIC AIHONG TANG, STAR Collaboration, AIHONG TANG COLLABORATION — It is demonstrated that strangelet production could be enhanced at forward region due to Pomeron cuttings[1]. We report the results of a strangelet search using a triggered data-set that sampled 60 million central (4%) Au+Au collisions at the top RHIC energy of = 200 GeV in the very forward rapidity region at the STAR detector. Two position sensitive Shower Maximum Detector (SMDs) were installed in the Zero-Degree Calorimeters (ZDCs) at STAR prior to run 2004. The calorimeters are located on both sides of the interaction point along the beam axis downstream of strong magnetic fields which sweep away particles with low rigidity. The ZDC-SMDs provide energy deposition as a function of transverse position in ZDCs. The strangelets, which have very large rigidities reflecting their large mass-to-charge ratios, are expected to produce an energy profile significantly different from neutrons. This is the first effort of strangelet search at RHIC, and also the first search at forward region. [1]M. Bleicher et al., Phys. Rev. Lett. 92 072301 (2004)

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