

## Di-Hadron Photoproduction in Au+Au 200 GeV Ultra Peripheral Collisions

Relativistic heavy-ion collisions generate extremely strong electromagnetic fields, providing an ideal environment to study the electromagnetic excitation of the vacuum. The Breit-Wheeler process, the lowest-order decay mode of the QED vacuum excitation into electron-positron pairs, has been experimentally verified by the STAR collaboration, stimulating further investigations of higher-order decay modes, such as baryon-antibaryon and meson-antimeson pairs.

This presentation reports the first measurements of baryon-antibaryon and meson-antimeson pairs from QED vacuum excitation in Au+Au ultra-peripheral collisions at  $\sqrt{s_{NN}} = 200$  GeV by the STAR experiment. The invariant mass and pair  $p_T$  distributions are shown. These measurements will shed new light on the understanding of the QED vacuum.

**Author:** WU, Xin (University of Science and Technology of China)

**Presenter:** WU, Xin (University of Science and Technology of China)

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