

27pWB-9 RHIC-PHENIX における $\sqrt{s_{NN}} = 200\text{GeV}$ 金・金原子核衝突実験での
 v_2^0 と direct photon の楕円方位角異方性の測定
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Measurement of v_2^0 and direct photon v_2 in $\sqrt{s_{NN}} = 200\text{GeV}$
AuAu collision at RHIC-PHENIX

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To study Quark Gluon Plasma, obtaining the information from initial collision state is important at high energy heavy ion collision. Photons are effective probes of initial state of high energy collisions because they do not interact with any other hadrons and they keep their conditions when they are generated in final state. Especially, direct photon measurement which is subtracted hadron decay photon from inclusive photon, is interest to study initial state of the heavy ion collision. Direct photons have several process to create them, and these photons generated at which stage is not understood. So, we suggest measuring elliptic flow (v_2) of direct photon.

We calculated v_2^0 and inclusive photon v_2 at RHIC PHENIX Au+Au data set acquired in Year-4. And subtracted hadron decay photons from inclusive photon, estimate direct photon v_2 near $p_T = 8\text{GeV}$. In this conference, we plan to talk about method of calculate direct photon v_2 , difficult points and problems, and discussion about information from direct photon v_2 at each p_T region.