

UrQMD at RHIC Energies

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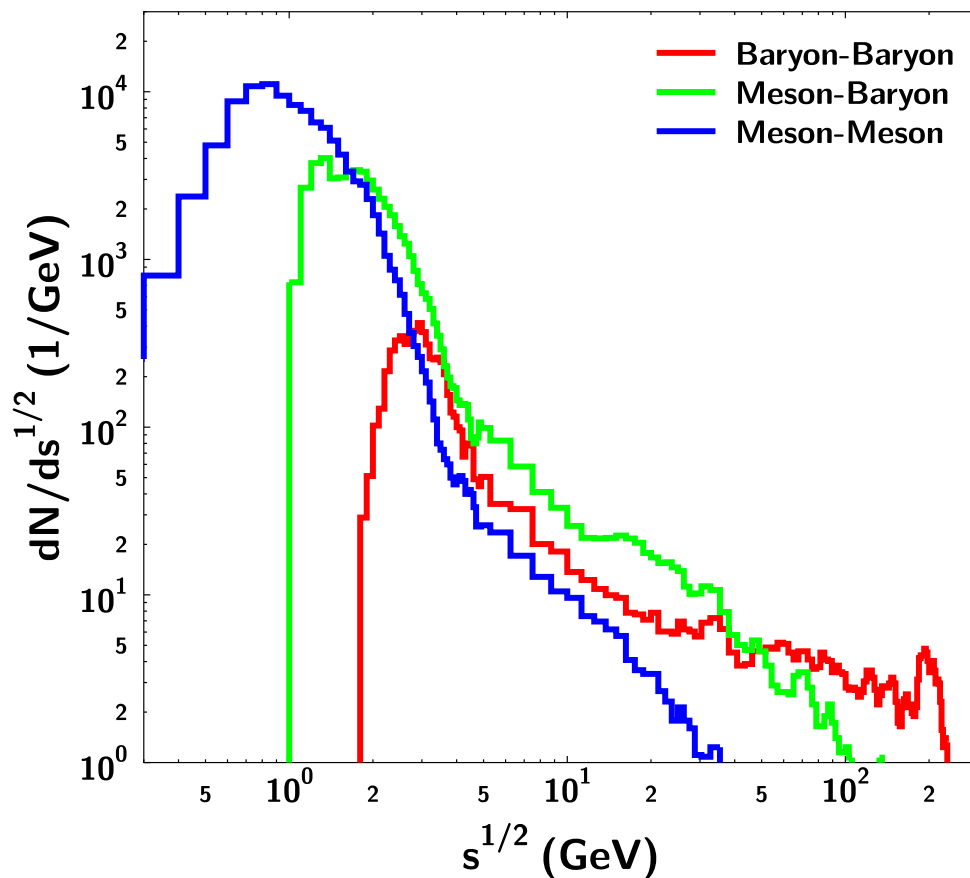
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Collision Spectra

- Center of mass energy of individual collisions

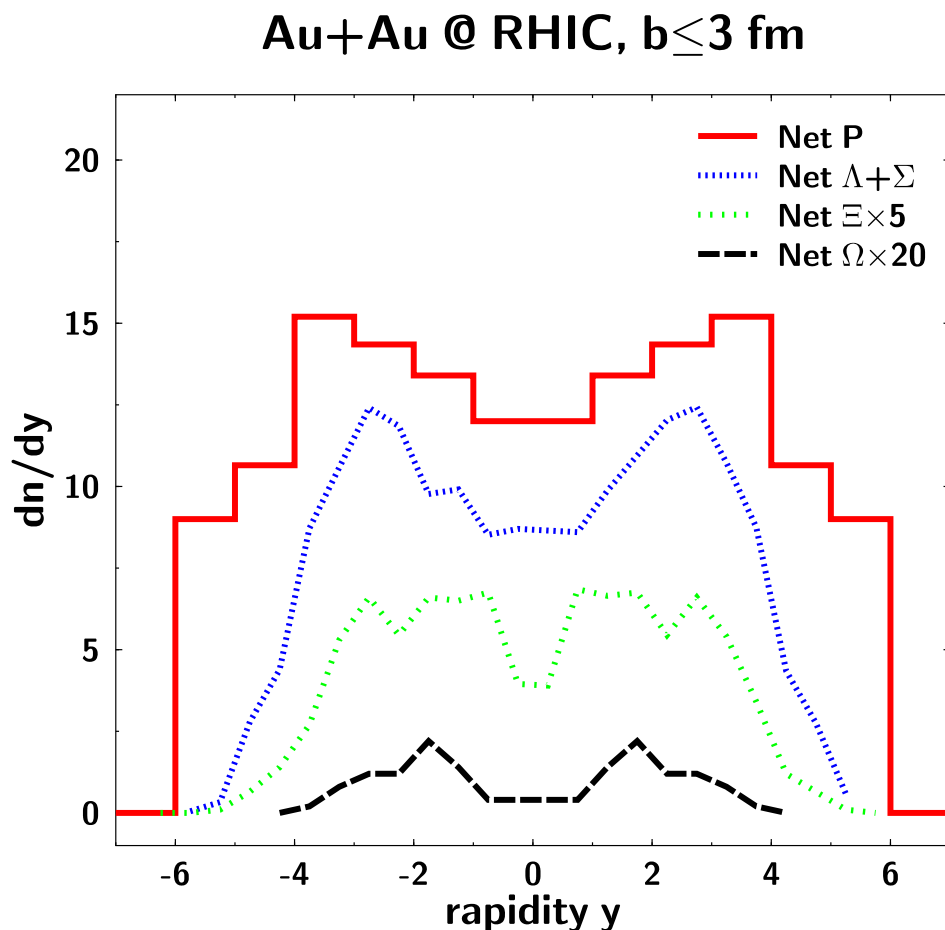
Au+Au @ RHIC , $b \leq 3$ fm



- Final state is dominated by meson-meson and meson-baryon reaction,
- Fraction of high energy baryon-baryon reactions is extremely small

Baryon Rapidity Distribution

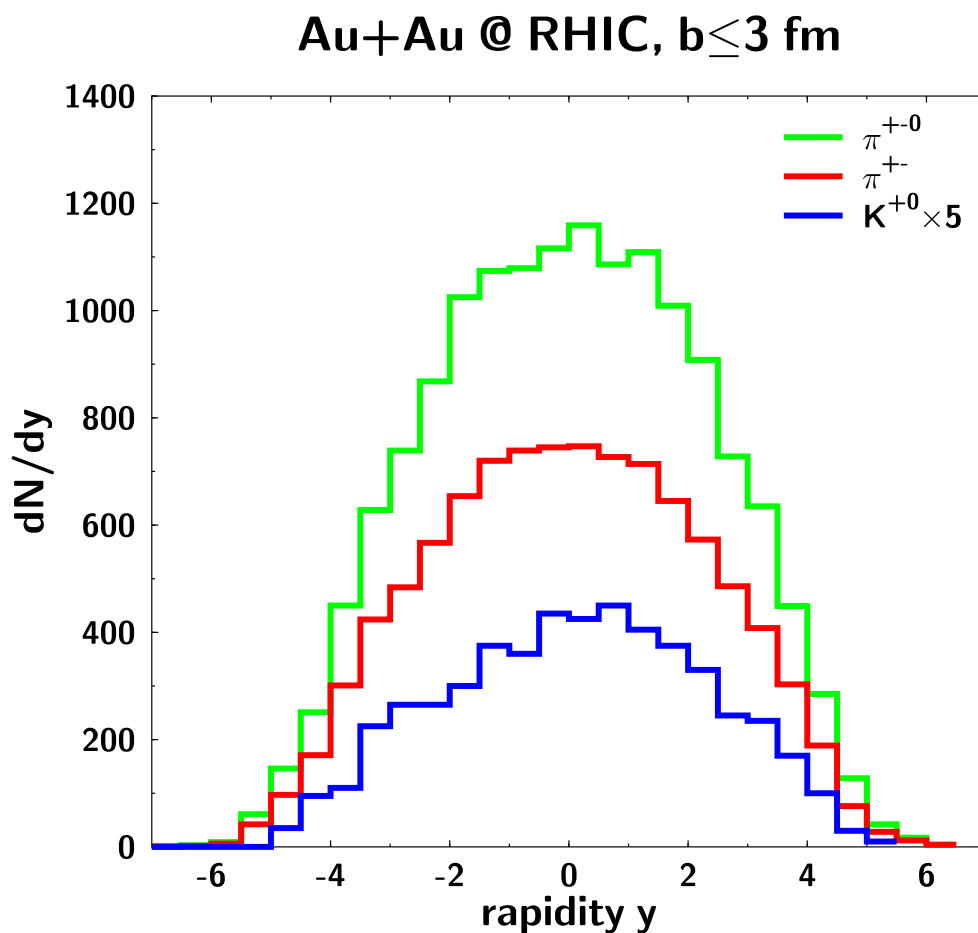
- Net protons, net $\Lambda + \Sigma$, net Ξ , net Ω .



- Rapidity distribution of all net baryons shows a **dip**
- Baryon to anti-baryon ratio at midrapidity: 3/1

Particle Production

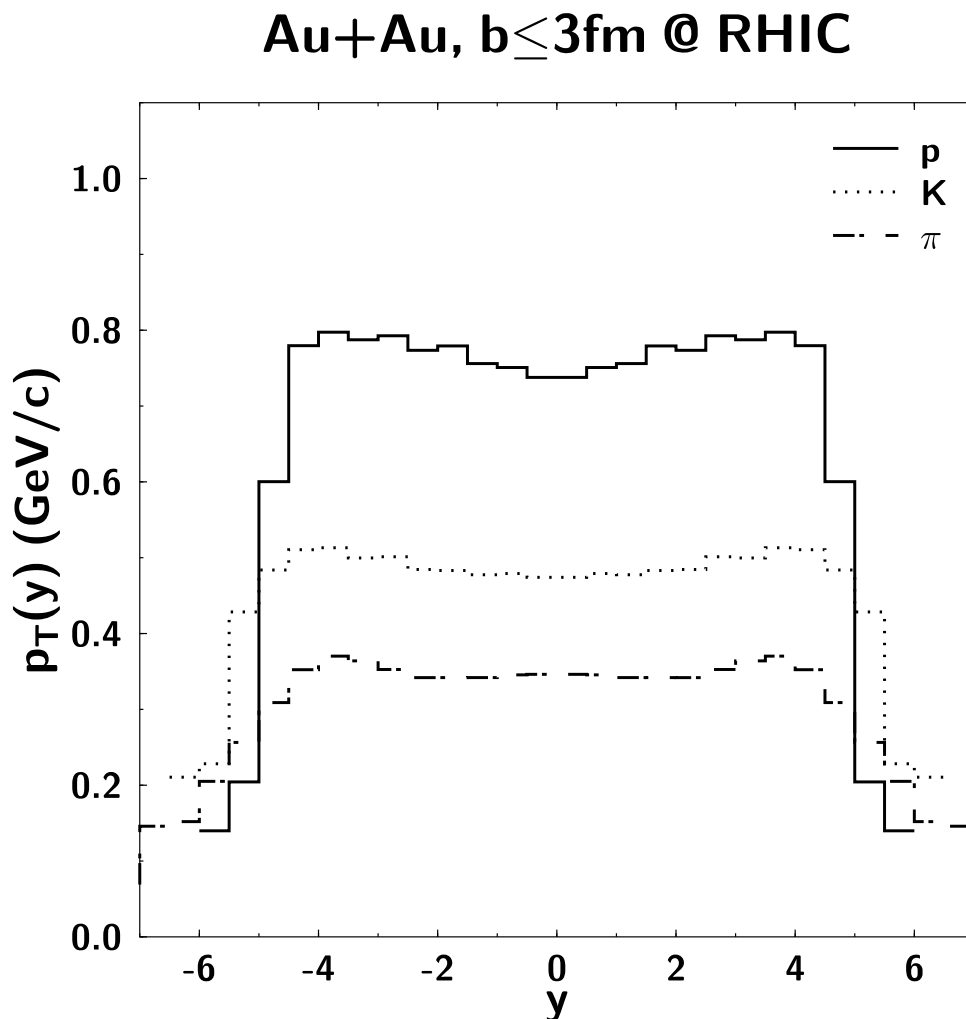
- Distributions of all Pions, charged Pions and Kaons



- More than **1100 Pions** at midrapidity,
- Approx. **750 charged Pions** at midrapidity
- Approx. **80 Kaons** at midrapidity

Creation of transverse expansion

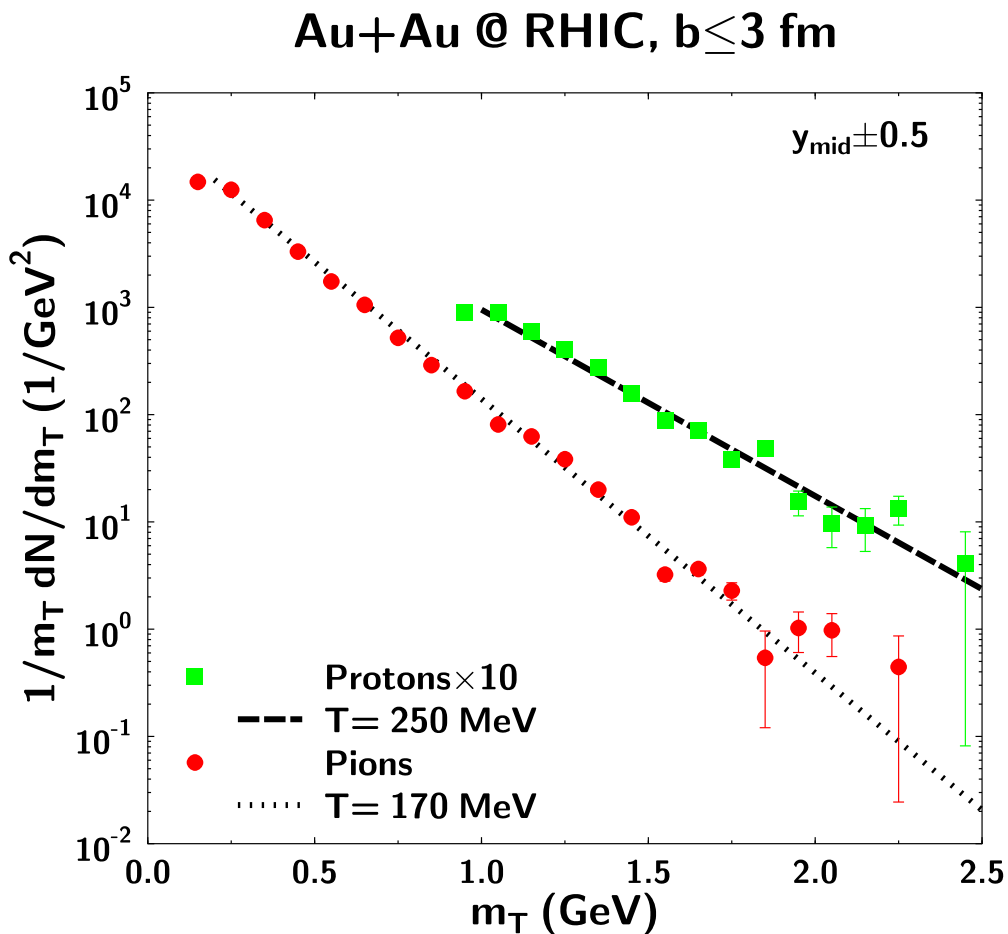
- Mean p_{\perp} as function of rapidity



- Remnants of **Sea-Gull effect** visible in the Proton distribution (Dip at $y = 0$)
- **Plateau** in the transverse momentum distribution of newly produced particles

Transverse momentum spectra

- Distributions of Protons and Pions at midrapidity



- Slopes at freeze-out are **comparable to SPS** (Pb+Pb)
- Inv. slopes increase with particle mass