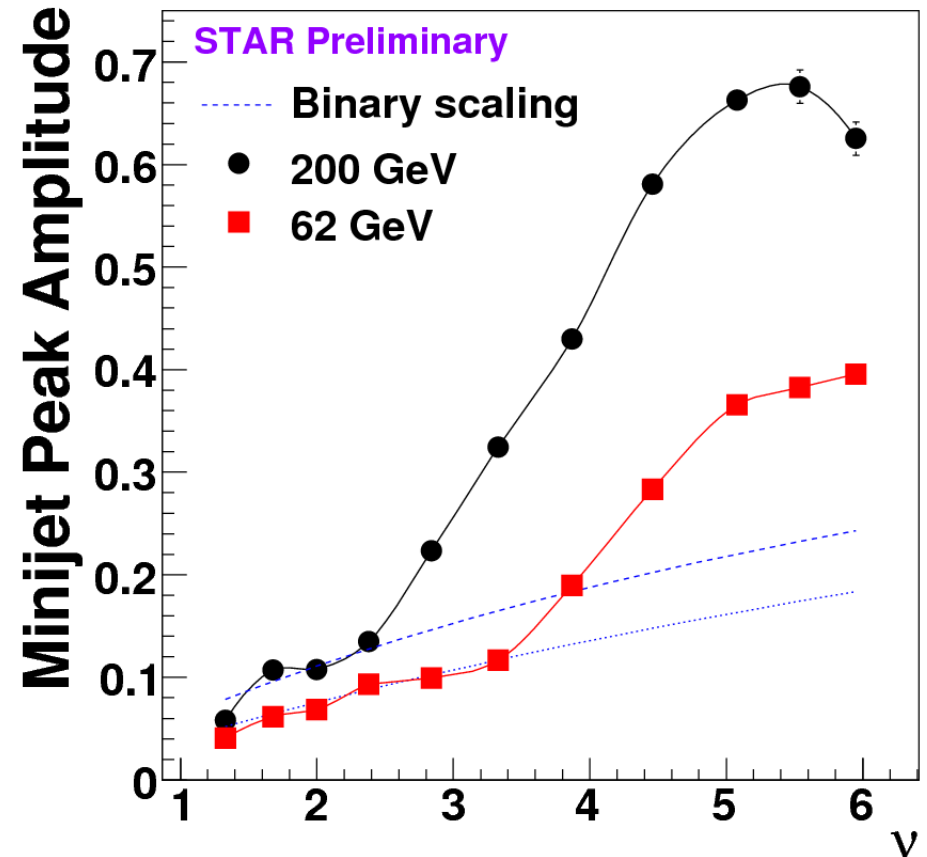
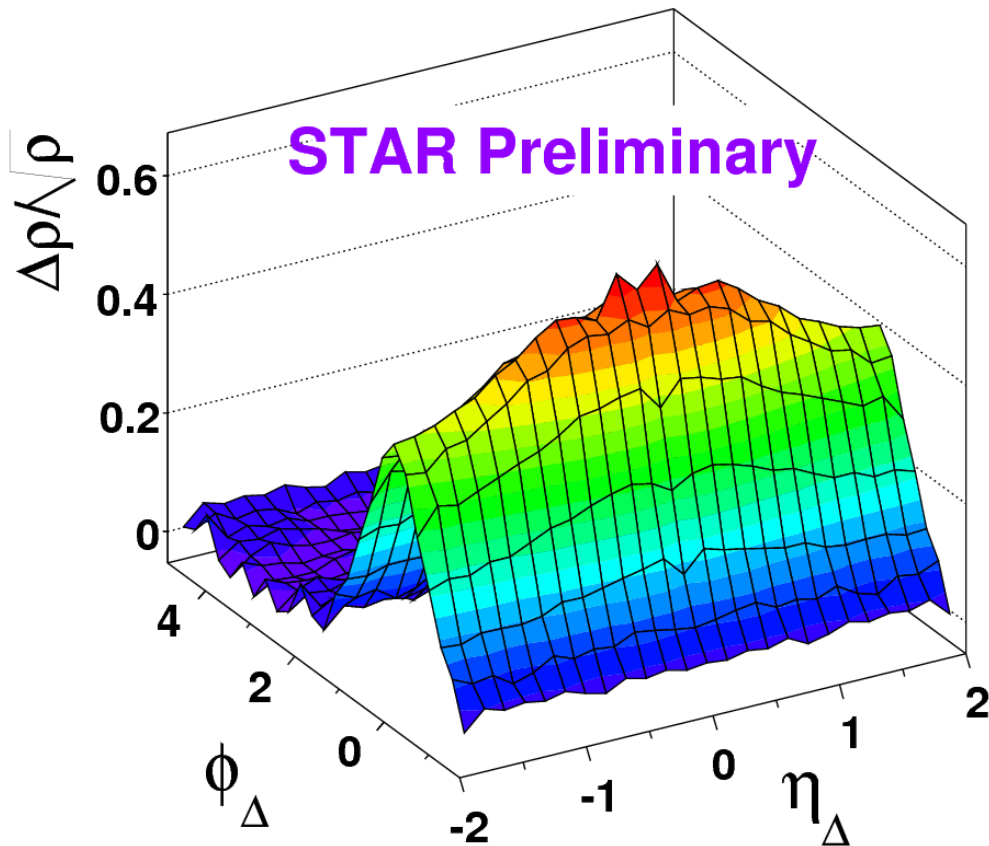
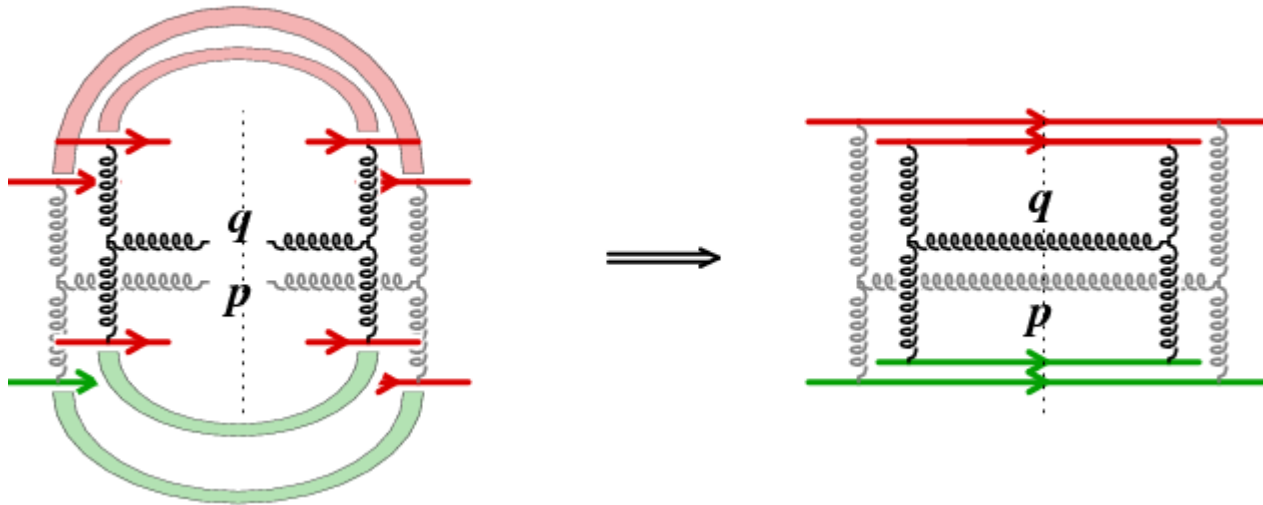


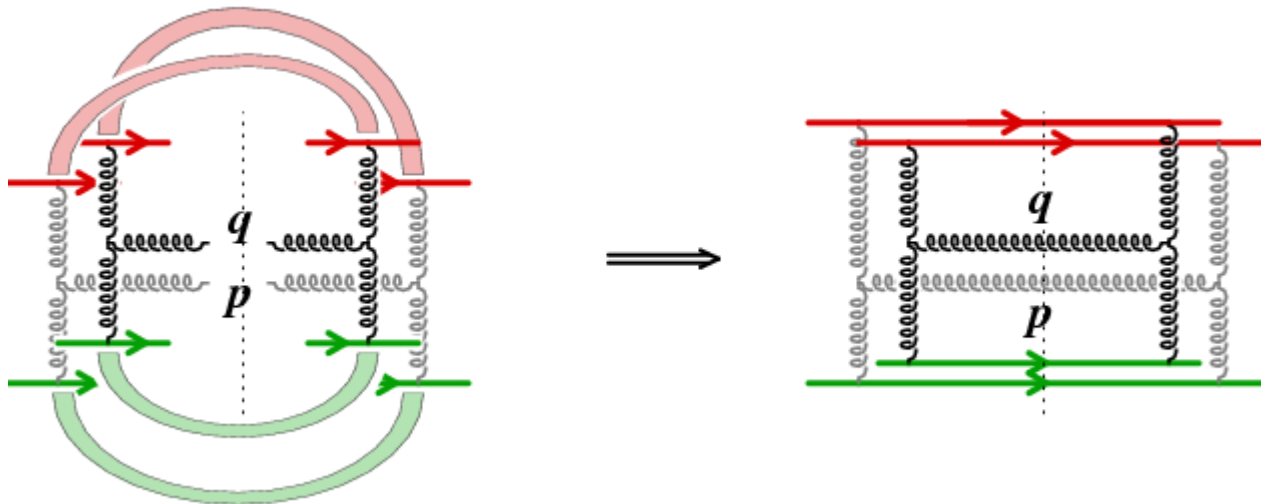
Snapshot of "Glasma" flux tubes: the STAR Ridge



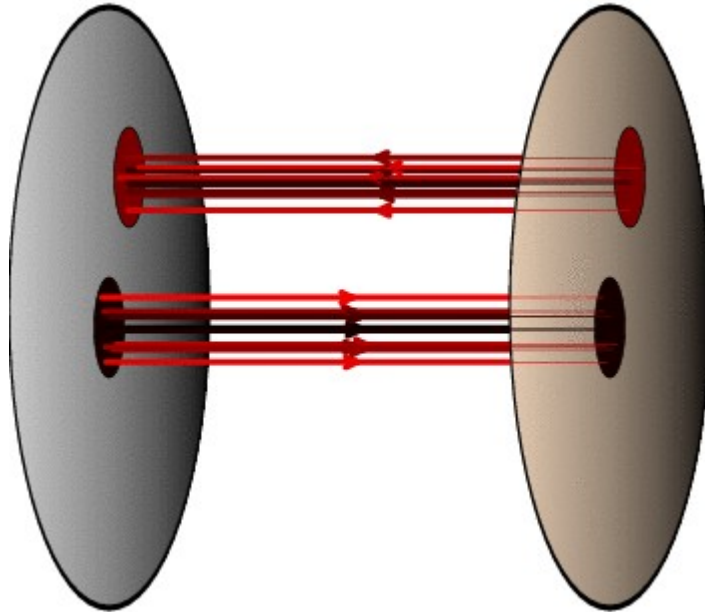
Independent production of two gluons: $\langle |A_\mu(\mathbf{p})|^2 \rangle \langle |A_\nu(\mathbf{q})|^2 \rangle$



Genuine two-particle production graphs:



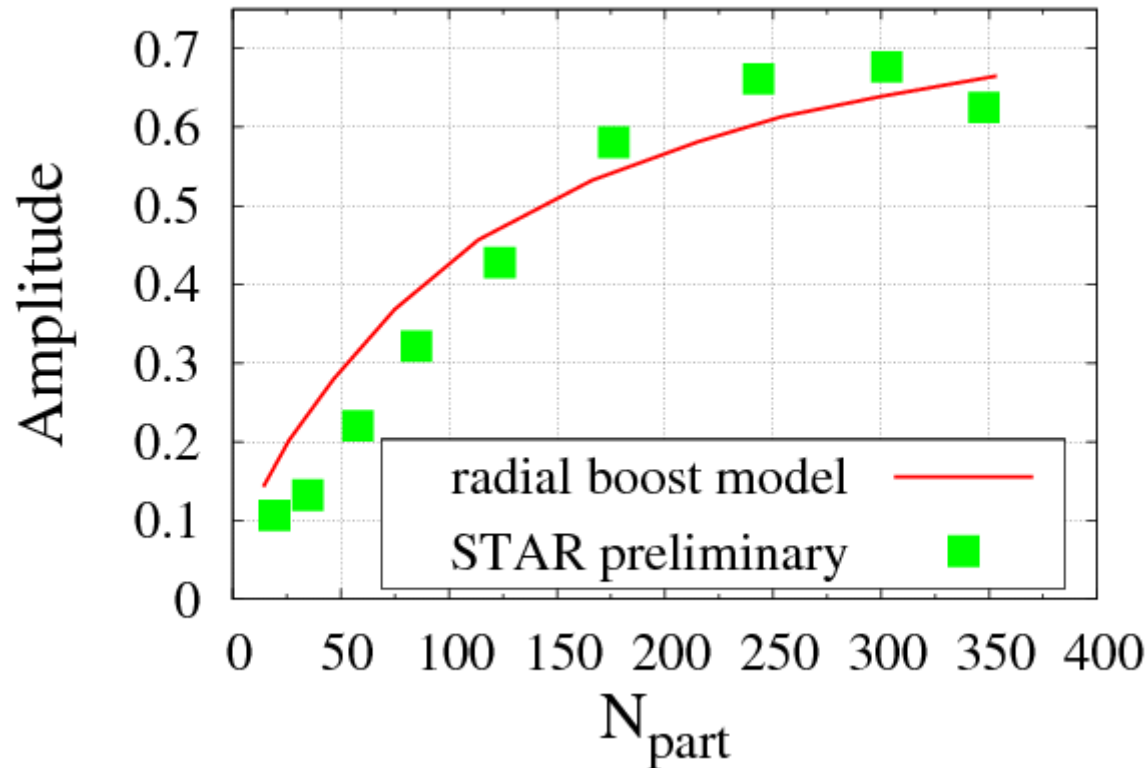
$$\begin{aligned}
C(\mathbf{p}, \mathbf{q}) &\sim \frac{\pi R^2}{(2\pi)^6} \frac{Q_s^8}{g^4} \frac{\pi N^2 (N^2 - 1)}{p_\perp^4 q_\perp^4} \int_{Q_s^2}^{\infty} \frac{dk_\perp^2}{k_\perp^4} \\
&= \frac{\pi R^2}{(2\pi)^6} \frac{Q_s^8}{g^4 Q_s^2} \frac{\pi N^2 (N^2 - 1)}{p_\perp^4 q_\perp^4}
\end{aligned}$$

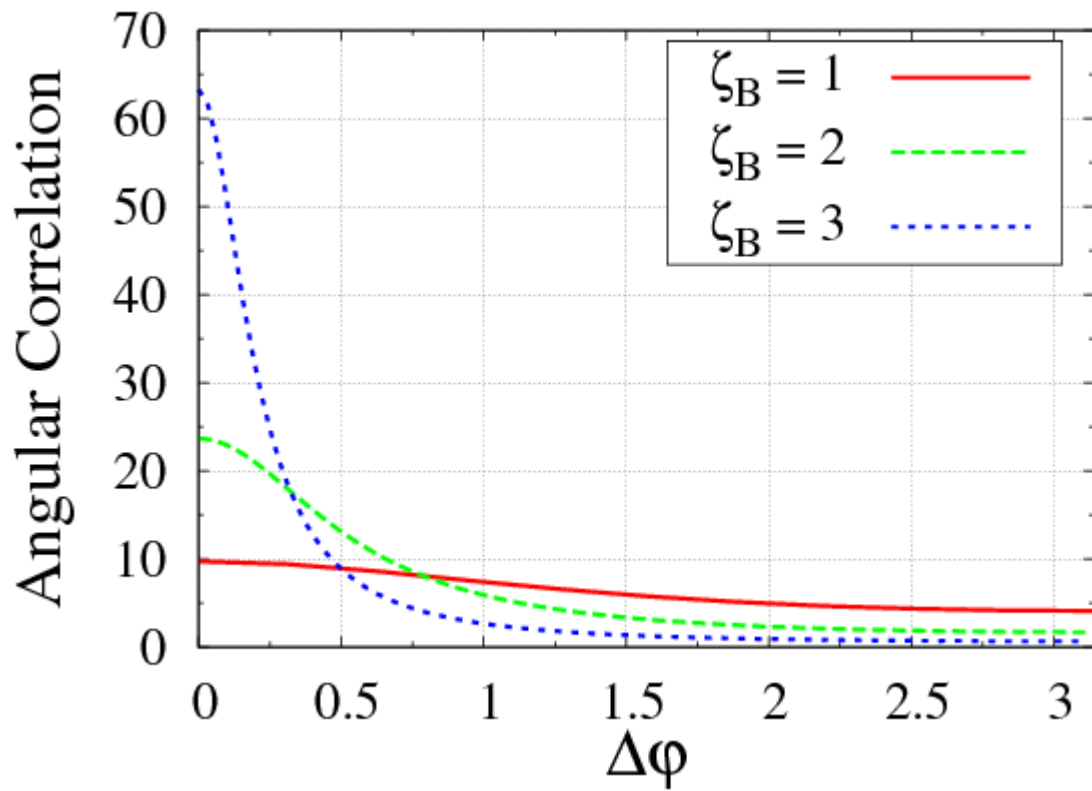
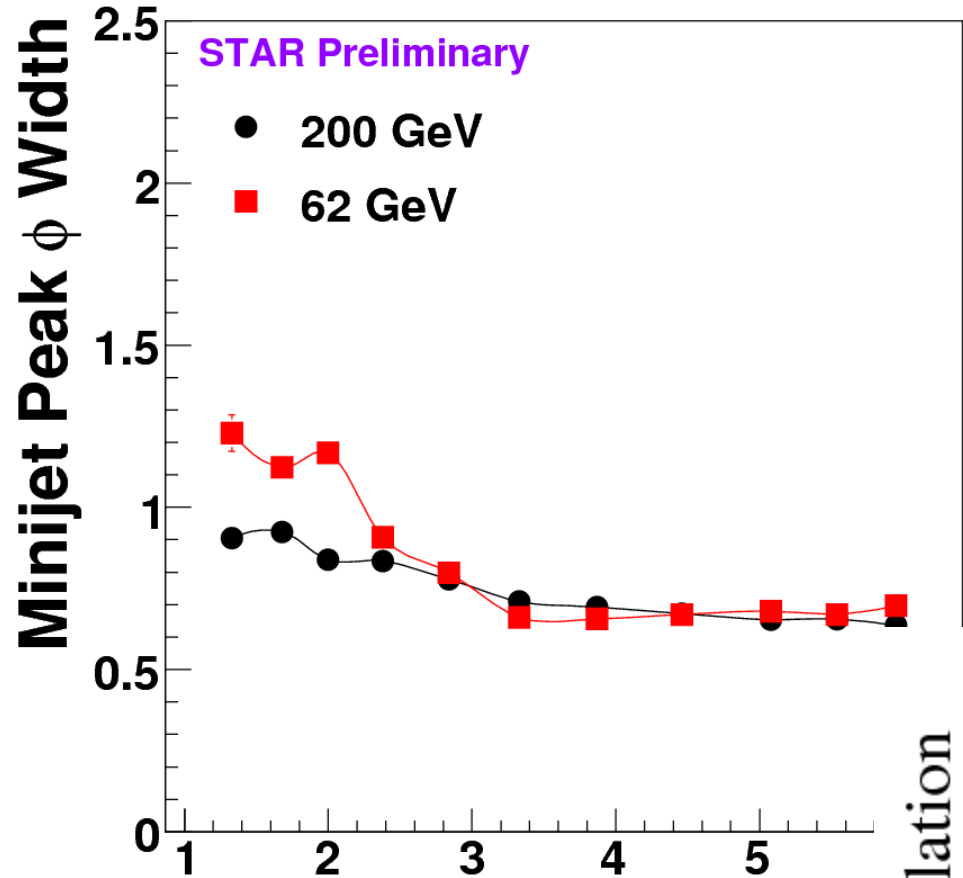


Distribution after radial boost (flow):

$$\sim K_R \frac{1}{\alpha_s(Q_s)} \frac{\cosh \zeta_B}{\cosh^2 \zeta_B - \sinh^2 \zeta_B \cos^2 \Delta\Phi/2}$$

Amplitude: $\mathcal{A} = K_R \frac{\gamma_B - \gamma_B^{-1}}{\alpha_s(Q_s)}$





Main features:

- Correlation flat in rapidity
- Particles produced at the same x_{\perp} (flux tube $\sim 1/Q_s$)
- Ridge structure independent of tr. mom.
- Radial boost reproduces amplitude
- φ -width from simple boost model too large
→ energy loss, ...