

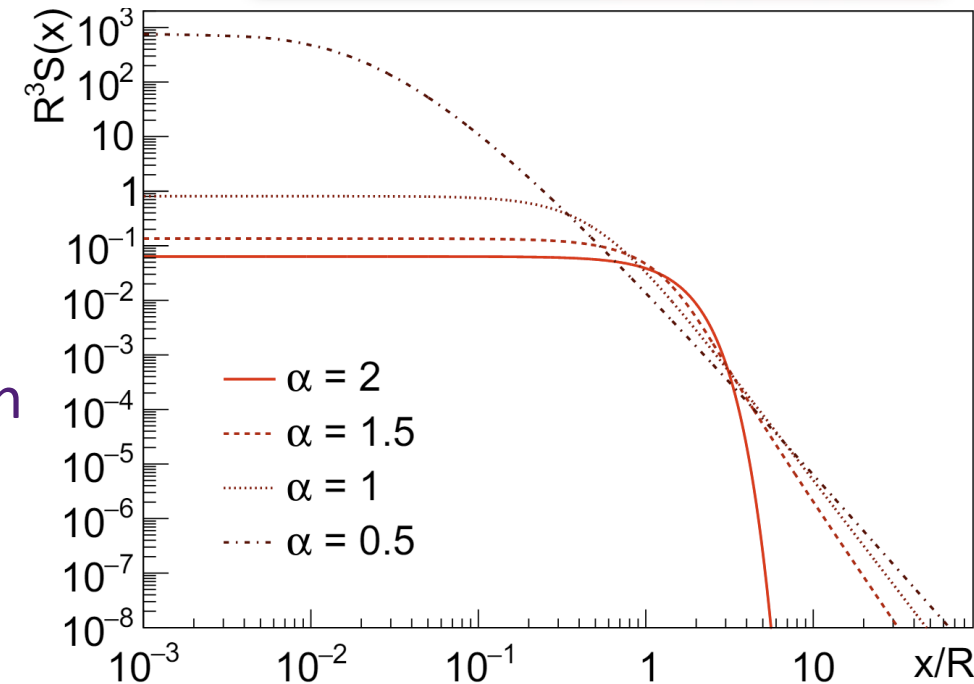
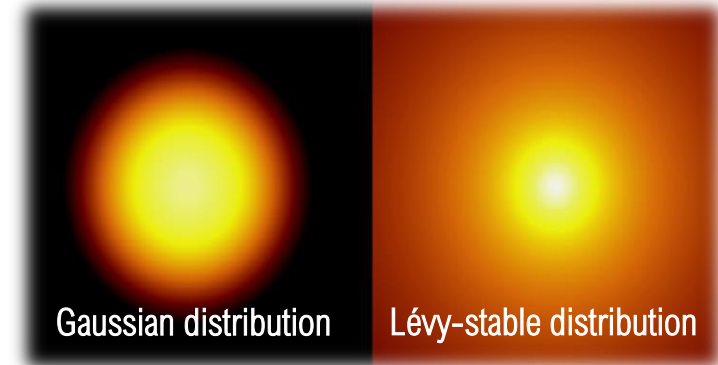
3D pion source images in 200 GeV Au+Au collisions with EPOS

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- Lévy shape of the pion source function seen in many experiments
- Motivation: does the Lévy shape show up in 3D too?
→ check in EPOS!
- $\sqrt{s_{NN}} = 200$ GeV Au+Au collisions generated by the EPOS program package
- Event-by-event and 3-dimensional investigation of the pion pair-source
- $D(r)$ pion pair source function fitted with Lévy distribution

$$D(r) = \mathcal{L}\left(r, 2^{\frac{1}{\alpha}}R_{out}, 2^{\frac{1}{\alpha}}R_{side}, 2^{\frac{1}{\alpha}}R_{long}, \alpha\right)$$



Results

- Source shape described well by 3D Lévy-stable distributions on an event-by-event basis
- Parameters compared to new final PHENIX angle-averaged results

