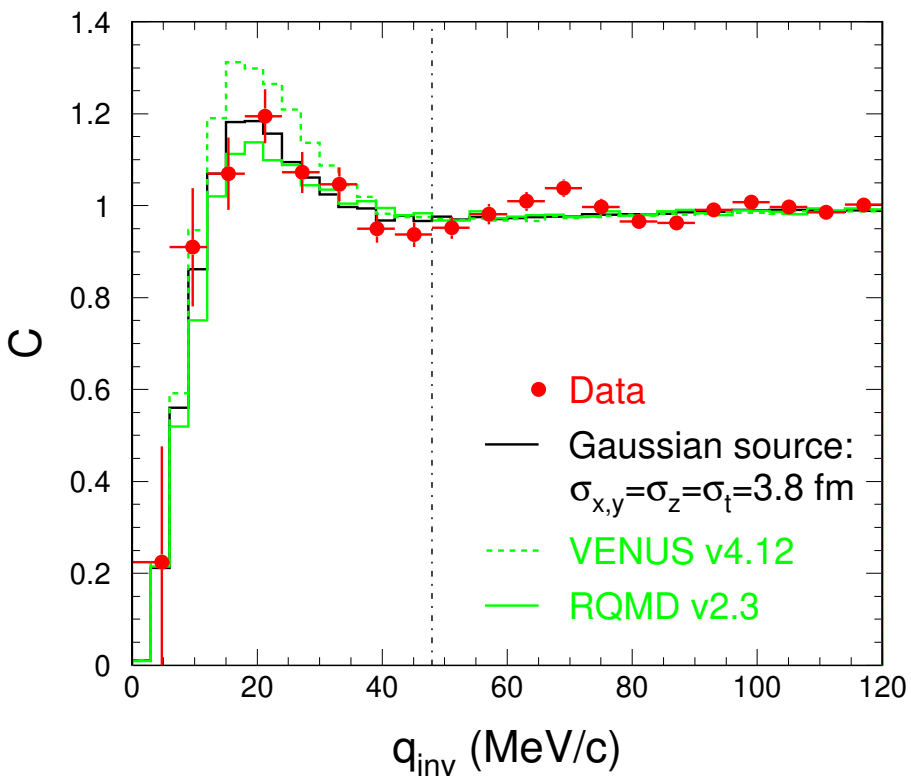
pp correlations

comparable contributions from:

- quantum statistics
- Coulomb repulsion
- strong interactions

$\Longrightarrow$ numerical calculation required (S.Pratt code)
using $\vec{x}, \vec{p}$ from microscopic model



$\sigma_{eff} = \frac{1}{\sqrt{2}}\sqrt[3]{\sigma_x \cdot \sigma_y \cdot \sigma_z} = 3.85 \pm 0.4 fm$

equivalent hard-sphere radius: $R^{HS} = 8.6 fm$

$\vec{x} - \vec{p}$ correlations (flow) reduce effective source size

Venus 4.12 : 3.9 $\rightarrow$ 3.5 fm, too small

RQMD 2.3 : 7.2 $\rightarrow$ 4.4 fm, too large