Other Two Particle Correlations

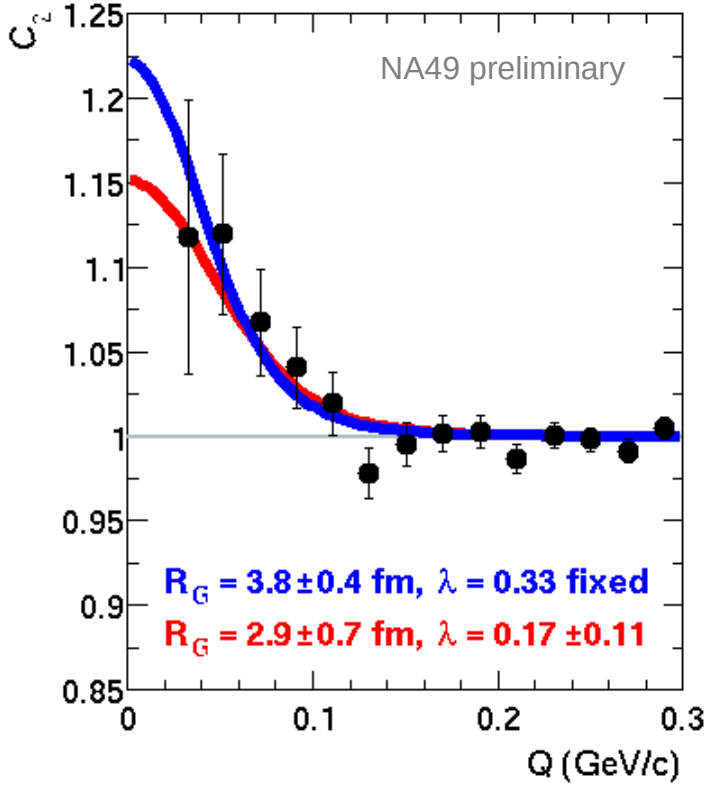
Λp Correlation Function

- Pb+Pb @ 158 *A*GeV
  20% most central
- 60k pairs with $Q < 0.3$ GeV/c

- Correlation due to strong FSI:
  - No quantum statistics
  - No Coulomb interaction
- Fit with theoretical c.f.

  R. Lednicky, V.L. Lyoboshitz,
  Sov. J. Nucl. Phys. 35 (1982) 770
  - Effective range approximation

    s-wave scattering length
    f_0 = -2.3 / -1.8 fm (singlett/triplett)
  - Spherical symmetric and static Gaussian source: R_G



- Compare:

  pp in Pb+Pb @ 158 *A*GeV (NA49):
  R_G = 4.0 fm

  Λp in Au+Au @ 6AGeV (E895)