

GEANT 3.21 Simulations of Balbekov's Ring - last update.

Z. Usubov , Oct, 29, 2002

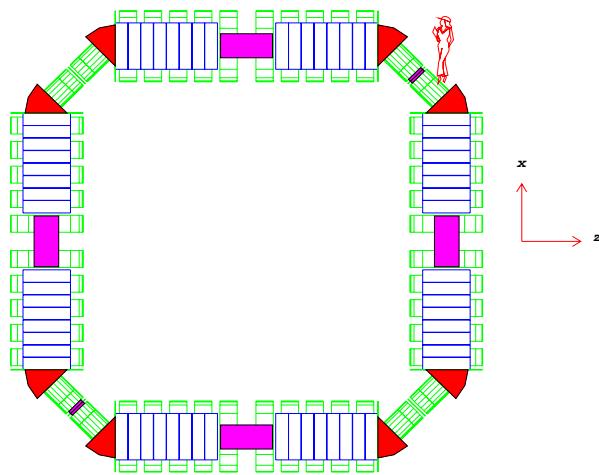


Fig.1

Initial beam conditions

- $E_0 = .250 \text{ GeV}$
- $\sigma_{Etot} = 18 \text{ MeV}$
- $\sigma_{Py} = \sigma_{Pz} = 32 \text{ MeV}/c$
- $\sigma_y = \sigma_z = 4 \text{ cm}$
- $\sigma_x = 8 \text{ cm}$

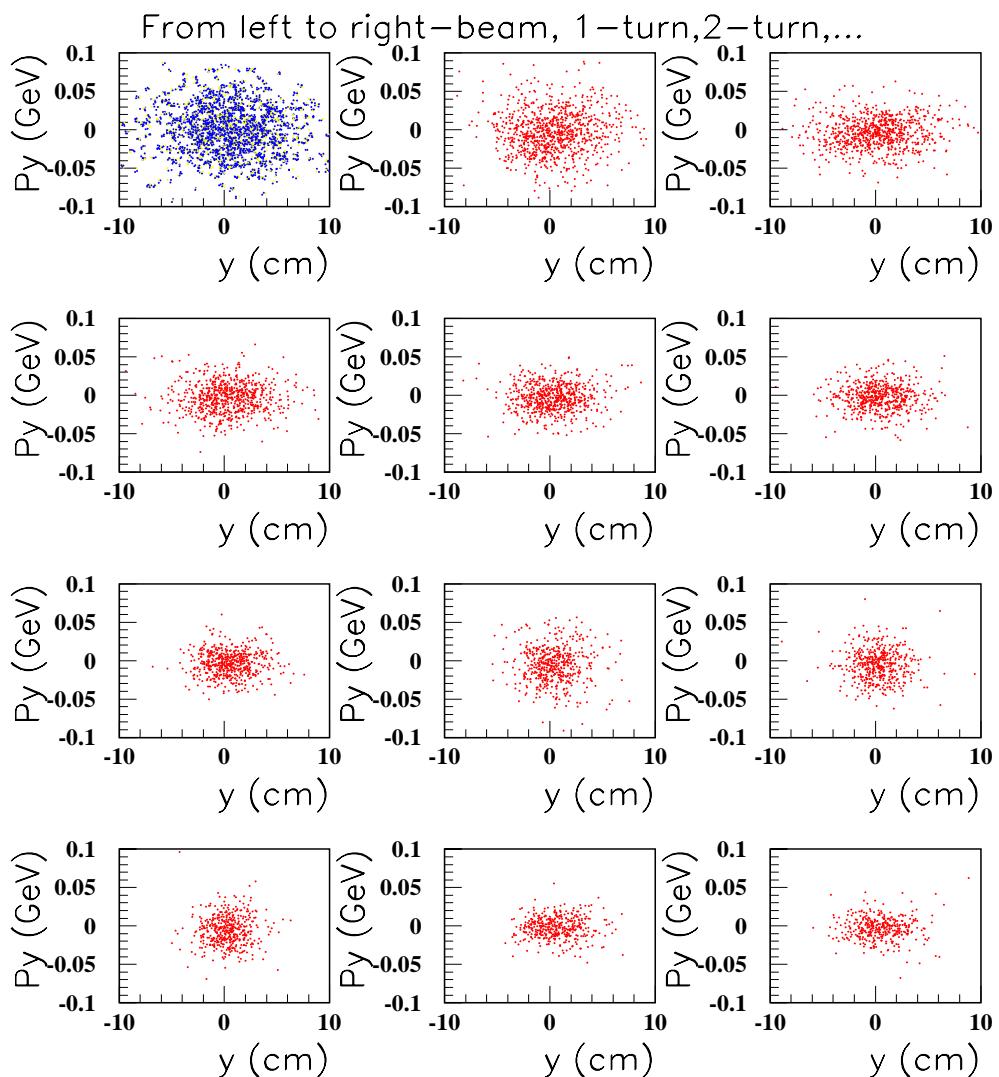


Fig.2 Transverse phase space turn by turn

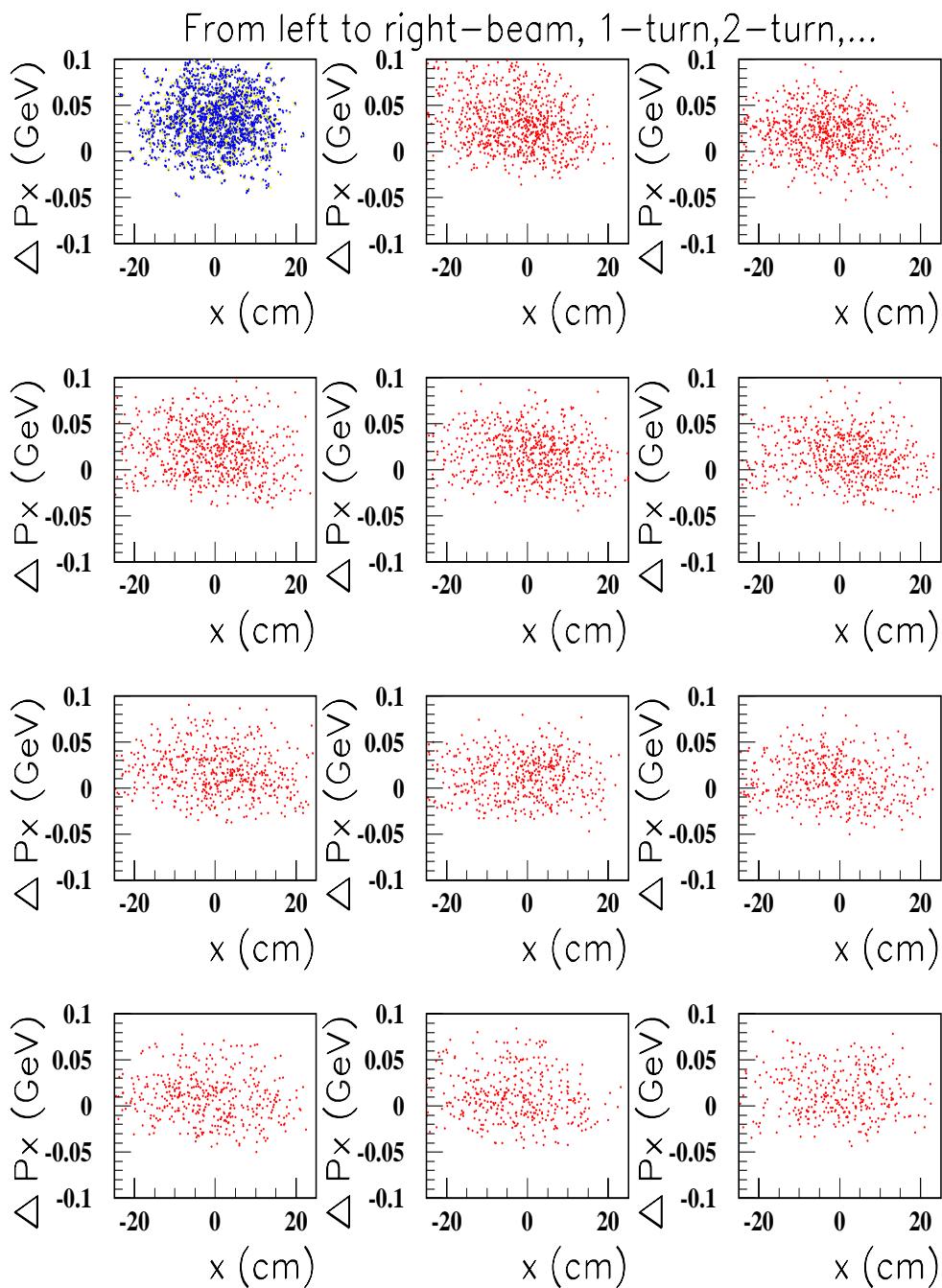


Fig.3 Longitudinal phase space turn by turn

Tetra Circular Muon Cooler

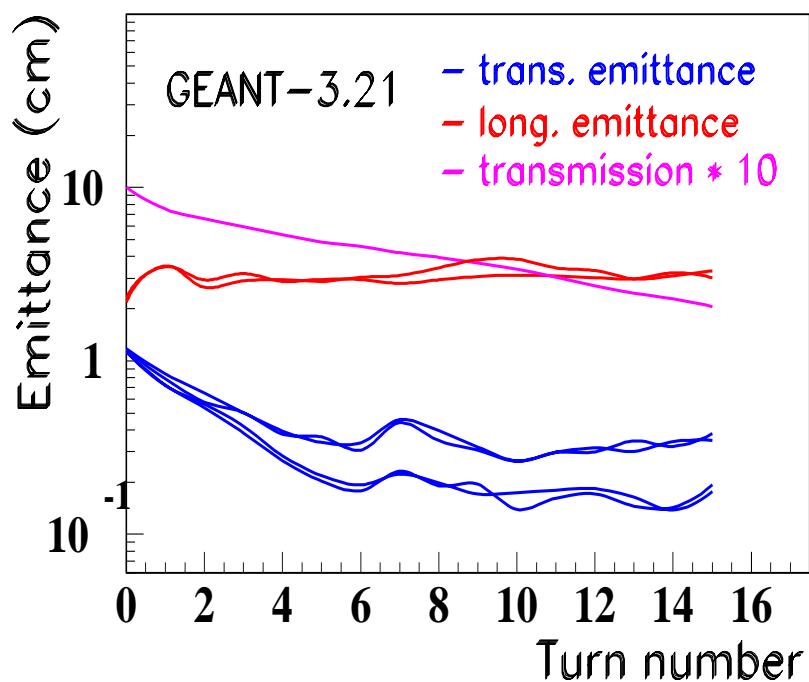


Fig.4 Emittance with and w/o mult scattering

Tetra Circular Muon Cooler

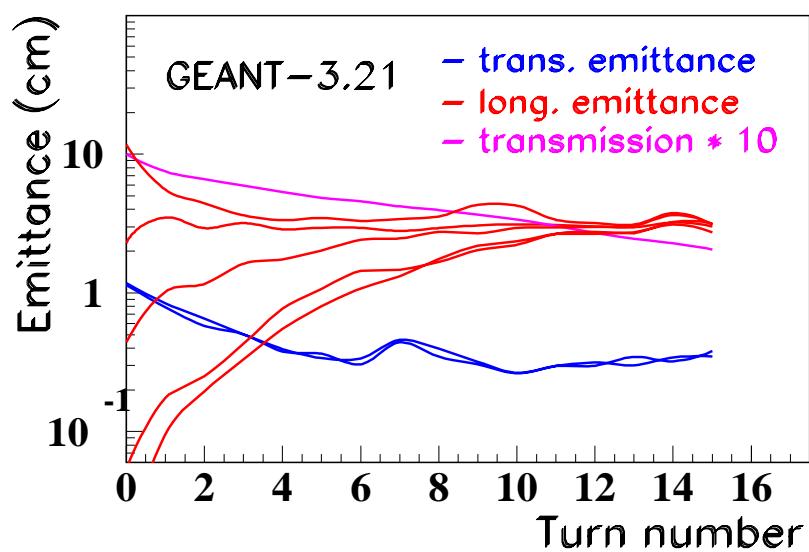


Fig.5 Long emittance with beams: all $\sigma = \sigma * 0.1, 0.2, 0.5, 1, 2$

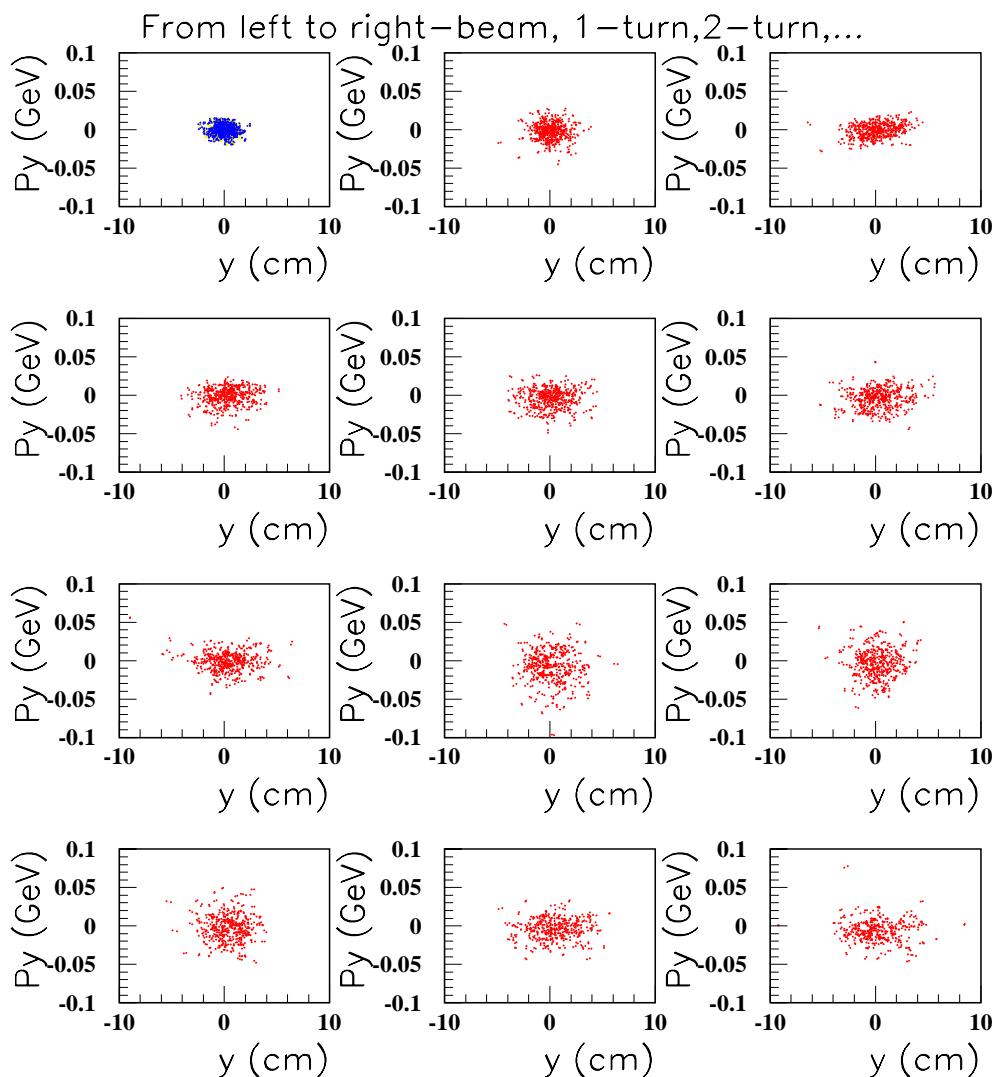


Fig.6 Transv heating of beam with $\sigma = 0.2\sigma$

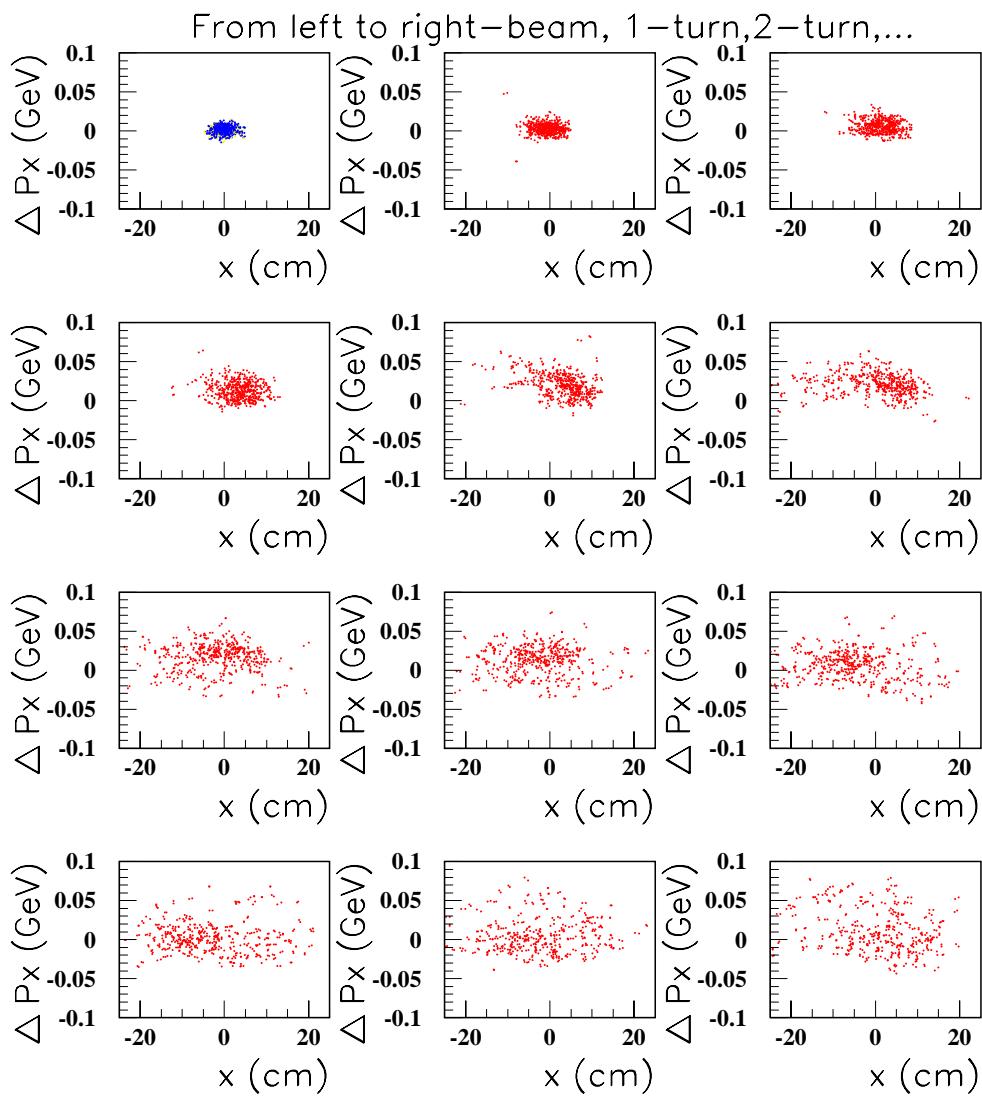


Fig.7 Long heating of beam with $\sigma = 0.2\sigma$

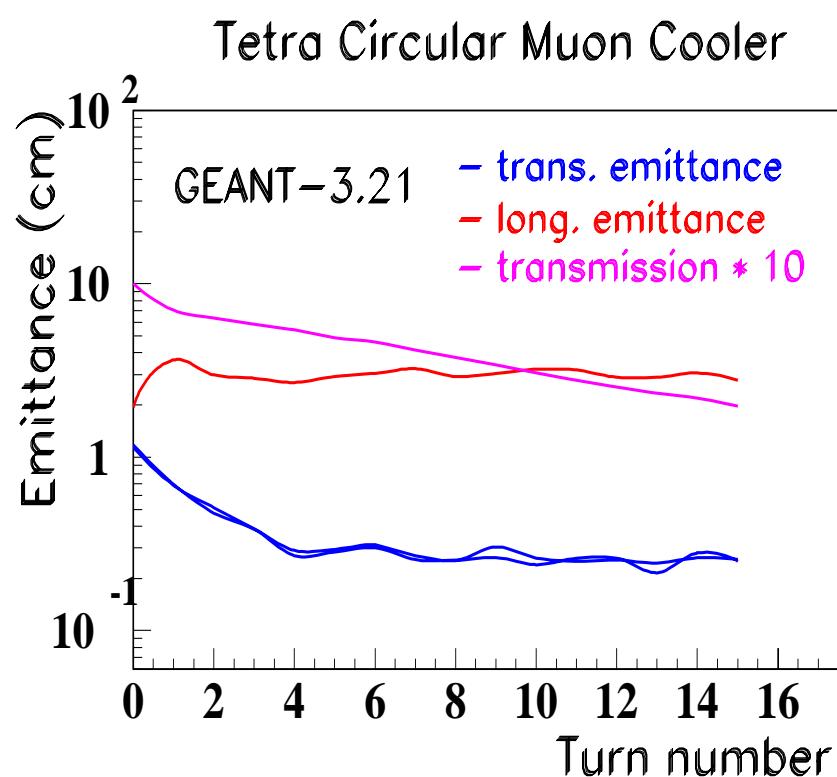


Fig.8 Emittance, FNPPD result.