

eRHIC Hadron Optics

- Choice: 3(4) beam, 2 beam
 - 3 (4 with positrons in eRing) beam
 - Put a second triplet after DX, (10.47m long triplet) *push DX ~5m from IP*
 - *Cannot* run unequal species in RHIC with leptons and vice versa
 - Least costly modification to RHIC insertion if we can turn off the standard RHIC triplets. Must have $\sim 3m$ space to IP.
 - 2 beam solution (*allow room for rotators*)
 - Separate the beams vertically $\sim 3m$ and $\sim 3m$ space to IP
 - Correct for the vertical dispersion, as well as horizontal
 - Strong vertical bends required in a limited space.
 - Requires real estate for 2 cells between the vertical bends.
 - Must ensure equal circumference with equal species.