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RHIC May 99 Commissioning Optics

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May 1999

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U.S. Department of Energy

USDOE Office of Science (SC)

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RHIC May 99 Commissioning Optics

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The following is a list of parameters for the May 1999 commissioning optics, denoted by "may99comm". This optics is different from the nominal injection optics since there will not be any bipolar power supplies yet. The β^* will not be changeable at this time. However, the tunes, chromaticities and many other parameters can be changed during this commissioning. Below is a list of optics parameters for the May 1999 commissioning exercise:

Parameter Symbol	Comment	Value
C	Circumference	3833.845181 m
α	Momentum Compaction Factor	0.0189165
γ_T	Gamma Transition	22.992134
$\beta_x(max)$	The maximum Beta function, x	444.718 m
$\beta_y(max)$	The maximum Beta function, y	477.032 m
$\eta_x(max)$	The maximum Dispersion, x	1.932 m
$\eta_x(min)$	The minimum Dispersion, x	-0.411 m
ν_x	The x tune	28.19
ν_y	The y tune	29.18

RHIC – May, 1999 Commissioning Lattice

$\nu_x = 28.19$ $\nu_y = 29.18$ $\beta^* = 2.93187$ FILE = rhblue.optics

