The maximum $\gamma\gamma$ center-of-mass energy is determined by

$$W_{\gamma\gamma}^{max} \approx 2\,\gamma\,(hc/R)$$

Where γ is the Lorentz factor in the nuclear center-of-mass.

For Au/Pb

	γ_{cm}	E_γ^{max}[GeV]	$W_{\gamma\gamma}^{max} \approx 2E_\gamma^{max}$ [GeV]
CERN SPS	9	0.25	0.5
RHIC	100	3	6
CERN LHC	2900	80	160

$\Rightarrow$ RHIC will essentially be the first facility where coherent interactions with hadronic final states can be studied with heavy nuclei.