Beam Tests at BNL

The BNL AGS has proton beam parameters closest to those desirable for a muon collider source.

Parameter	Muon Collider	BNL AGS	FNAL Booster	CERN PS	LANSCE PSR
Proton Energy (GeV)	16-24	24	8.9	24	0.8
p/bunch	5×10^{13}	1.6×10^{13}	6×10^{10}	4×10^{12}	3×10^{13}
No. of bunches	2	6	84	8	1
p/cycle	1×10^{14}	1×10^{14}	5×10^{12}	3×10^{13}	3×10^{13}
Bunch spacing (ns)	≈ 1000	440	18.9	250	–
Bunch train length (μs)	≈ 1	2.2	1.6	2.0	0.25
RMS Bunch length (ns)	≈ 1	≈ 10	≈ 1	≈ 10	≈ 60