

Survey of Proton Beams for Targetry Studies

(K.T. McDonald, Nov. 4, 2002)

Parameter	Muon Collider	BNL AGS	FNAL Booster	CERN PS	LANSCE PSR	KEK MR	JHF RCS	JHF MR
Proton Energy (GeV)	16-24	24	8.9	24	0.8	12	3	50
p/bunch	5×10^{13}	1.6×10^{13}	6×10^{10}	4×10^{12}	3×10^{13}	7×10^{11}	4×10^{13}	4×10^{13}
No. of bunches	2	6	84	8	1	9	2	8
p/cycle	1×10^{14}	1×10^{14}	5×10^{12}	3×10^{13}	3×10^{13}	6×10^{12}	8×10^{13}	3×10^{14}
Bunch spacing (ns)	≈ 1000	440	18.9	250	–	140	600	600
Bunch train length (μs)	≈ 1	2.2	1.6	2.0	0.25	1.1	0.6	4.2
RMS Bunch length (ns)	≈ 1	≈ 10	≈ 1	≈ 10	≈ 60	≈ 10	≈ 10	≈ 10