	SNS	CERN	Fermilab	Laser Notcher
H- Energy (GeV)	1 GeV	4 GeV	8 GeV	750 KeV
H- Power (MW)	1.2 – 3 MW	0.19 MW	340 KW	4 W
Microbunch length	50 ps	40 ps	60 ps	1-1.5 ns
Microbunch frequency	402.5 MHz	352 MHz	162.5 MHz	201.25 MHz
Macropulse length (ms)	1 ms	2 ms	4 ms	22-25 us (50-60ns)
Macropulse rep. rate	60 Hz	1 Hz	10 Hz	15 Hz (450.75 KHz)
Stripping scheme	n=3	n=3	n=3	Ionization
Laser wavelength	355 nm	1064 nm	~1 or (~2) um	1064 nm
Micropulse energy	50 uJ	92 uJ	300 uJ (80 uJ)	2 mJ
Macropulse energy	20 J	65 J	195 J (52 J)	20 mJ
Average power	1200 W (20KW)	65 W (33 KW)	1950W (520W)	0.3 W (12 KW)
Optical cavity	100 x	100x	w/o cavity?	21 reflections
Motivation	Loss control, radioactivation	Loss control, radioactivation , double turn #	Loss control, radioactivation	Loss control, radioactivation
Status	Ready for 10us experiment	Feasibility study	Feasibility study	Plan to install in Q2 2015

Laser beam quality	critical if w/ optical cavity
Spectrum width (FT limited?)	Needs to study its impact on stripping The requirement determines laser type Nd:YAG gain bandwidth
Linewidth of individual longitudinal mode	affects buildup cavity. Should < frep/Finesse
Polarization needs to be linear	Polarized field is needed for stripping. Important for cavity development.