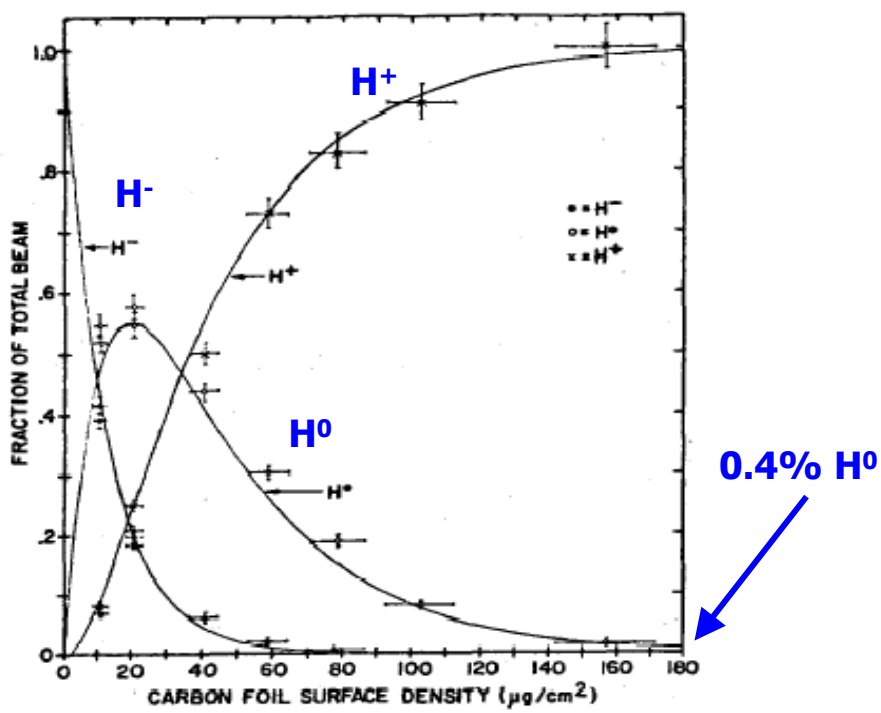
Energy Dependence of Foil Stripping Efficiency

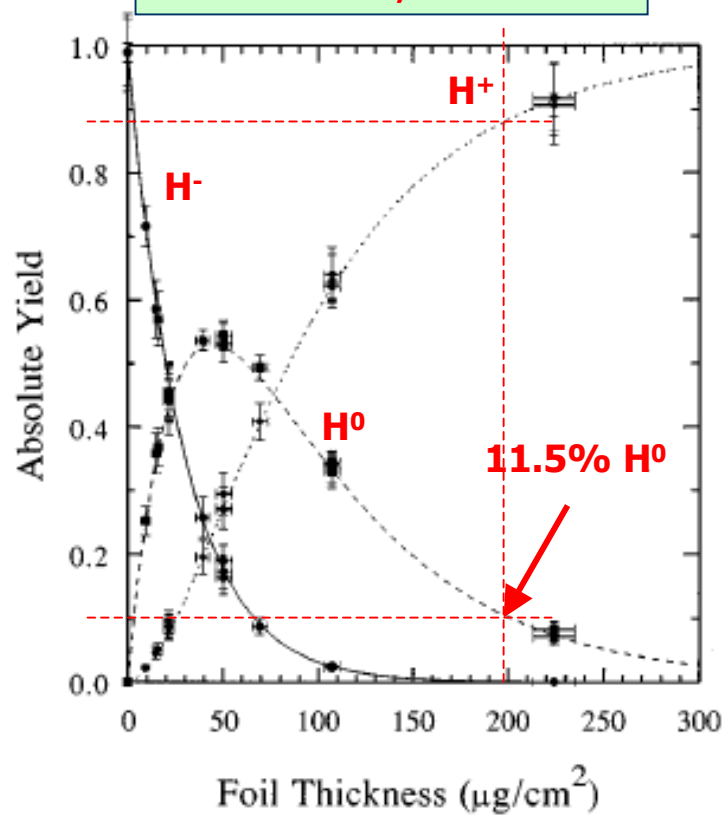
Webber & Hojvat, 1979

Fermilab linac, 200 MeV



Gulley et al., 1996

LANL linac, 800 MeV



Foil Stripping Efficiency at 200 MeV

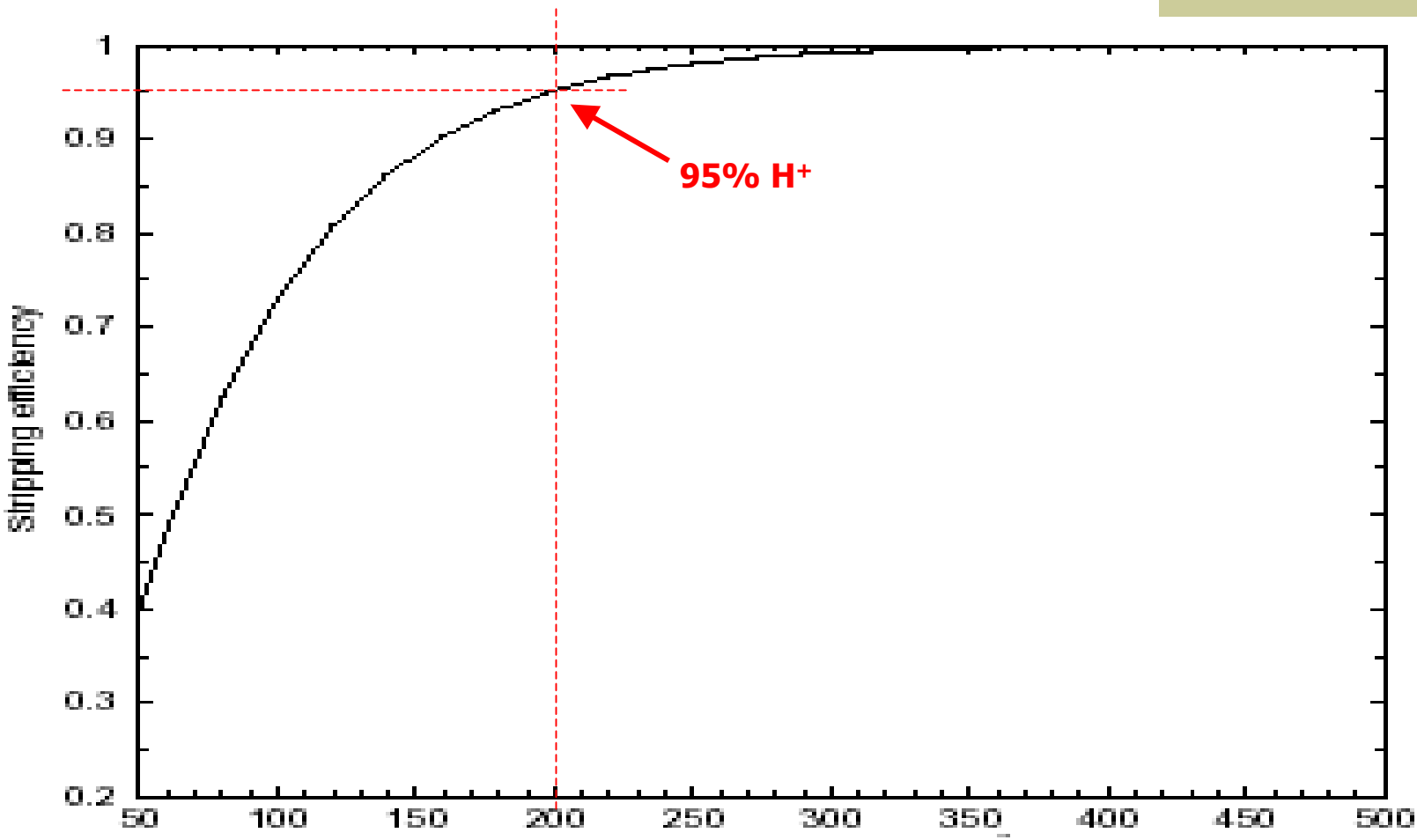
μg/cm²	H^-	H^0	H^+
100.00000	0.00060	0.08644	0.91296
110.00000	0.00028	0.06426	0.93545
120.00000	0.00014	0.04770	0.95216
130.00000	0.00006	0.03537	0.96456
140.00000	0.00003	0.02621	0.97376
150.00000	0.00001	0.01942	0.98057
160.00000	0.00001	0.01438	0.98562
170.00000	0.00000	0.01065	0.98935
180.00000	0.00000	0.00788	0.99212
190.00000	0.00000	0.00583	0.99416
200.00000	**0.00000**	**0.00432**	**0.99568**

Energy Dependence of Electron Loss Cross Section

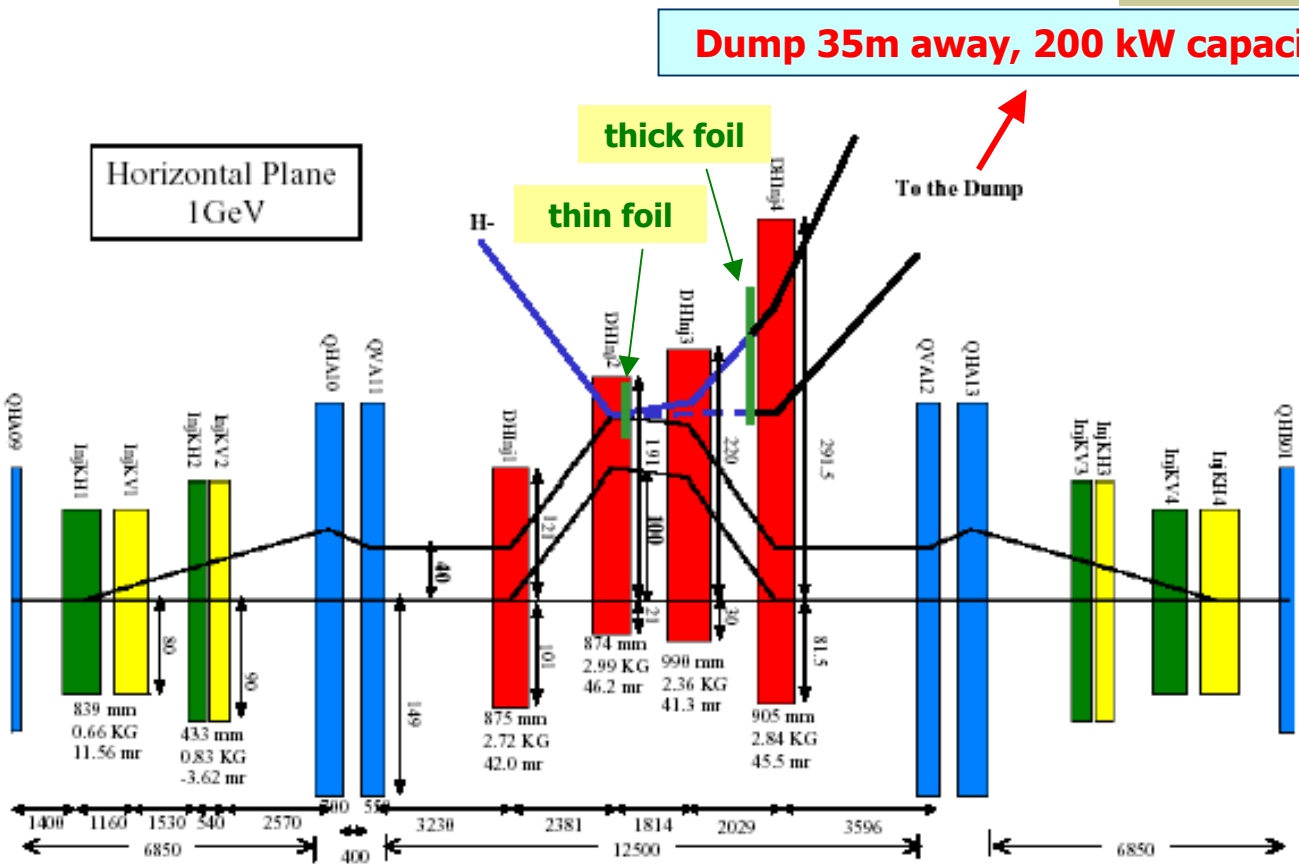
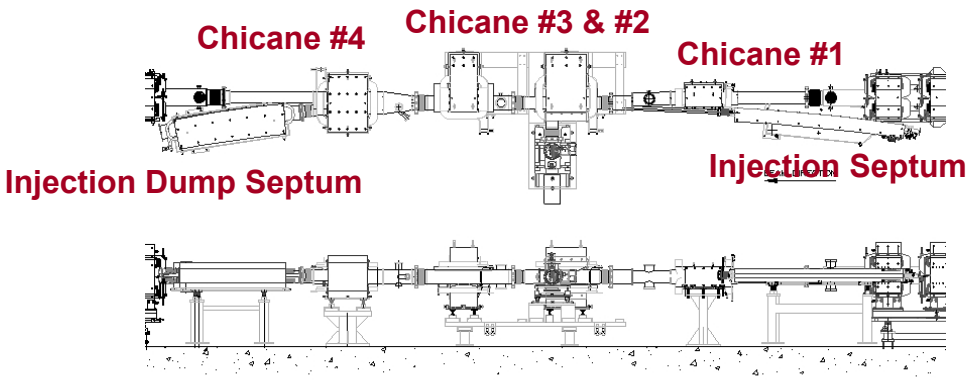
	Webber & Hojvat 200 MeV	Gulley et al. 800 MeV	
$\sigma(-, 0)$	$(1.56 \pm 0.14) \times 10^{-18}$	$(0.676 \pm 0.009) \times 10^{-18}$	cm^2
$\sigma(0, +)$	$(0.60 \pm 0.10) \times 10^{-18}$	$(0.264 \pm 0.005) \times 10^{-18}$	cm^2
$\sigma(-, +)$	$(-0.08 \pm 0.13) \times 10^{-18}$	$(0.012 \pm 0.006) \times 10^{-18}$	cm^2

Foil Stripping Efficiency at 400 MeV

(PD1, Ch.11, calculated by O. Krievosheev)



SNS Injection Region



SNS Chicane #3 & #2 (Orbit Bump)