



Simulation of Be windows

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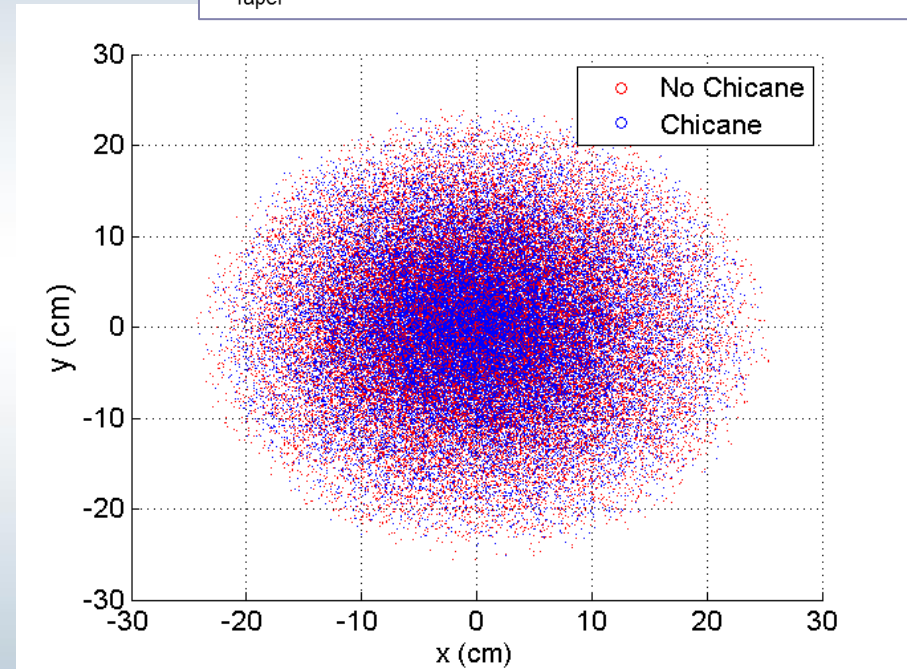
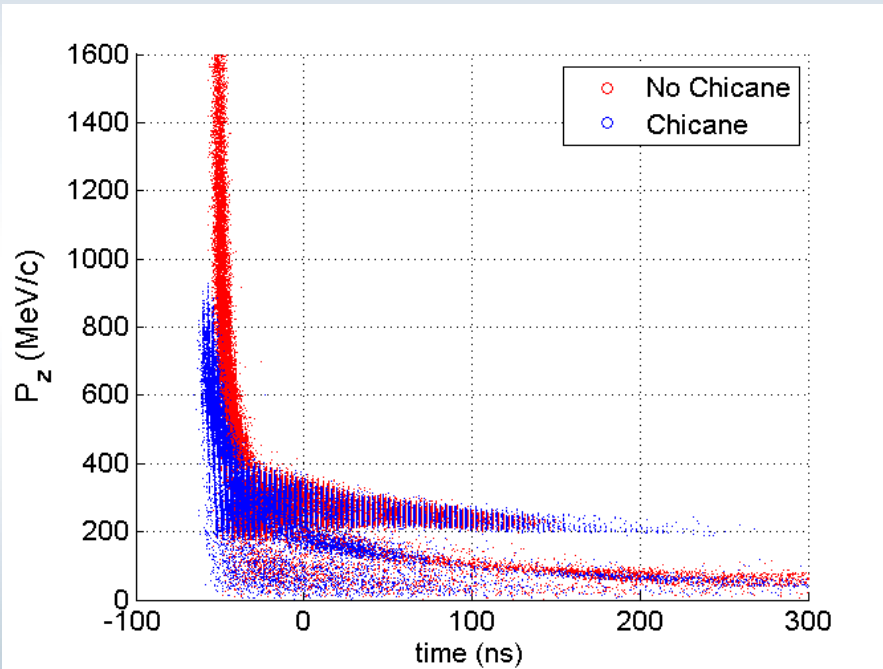
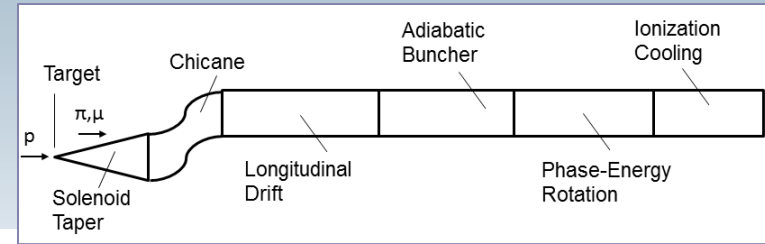
Brookhaven National Laboratory

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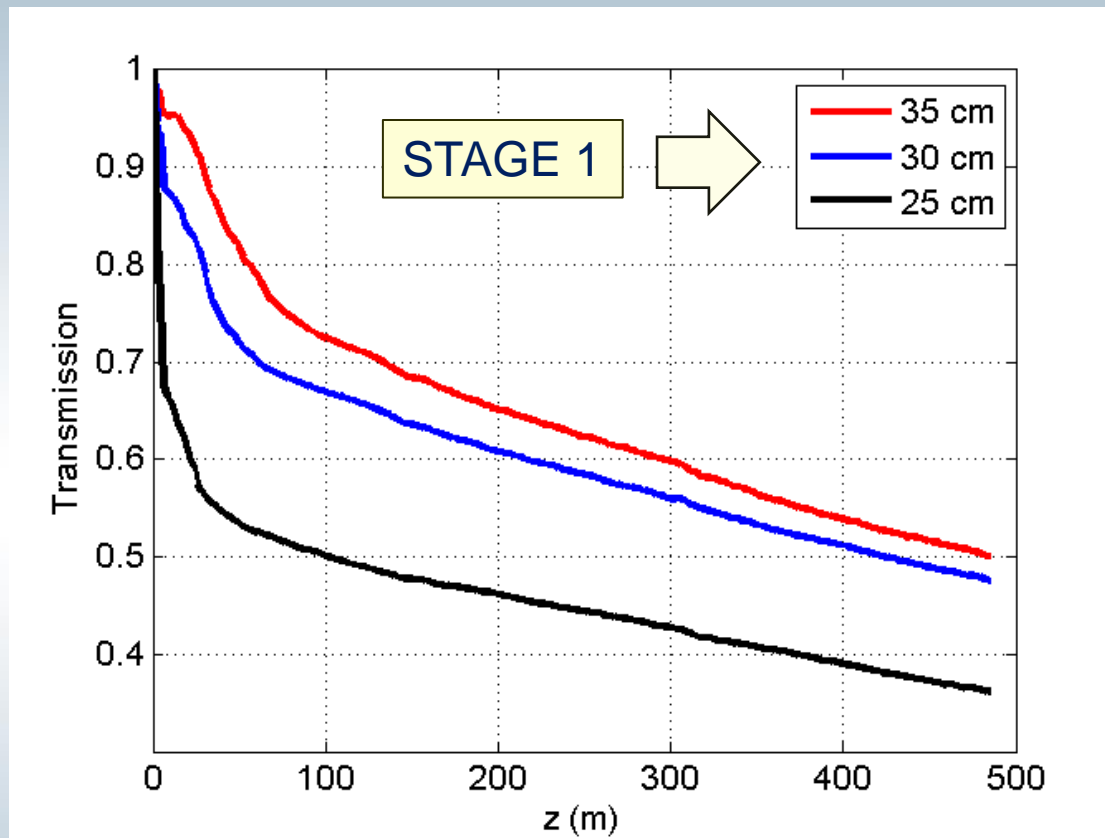
New Distribution: Chicane included

- Beam at the phase-rotator:



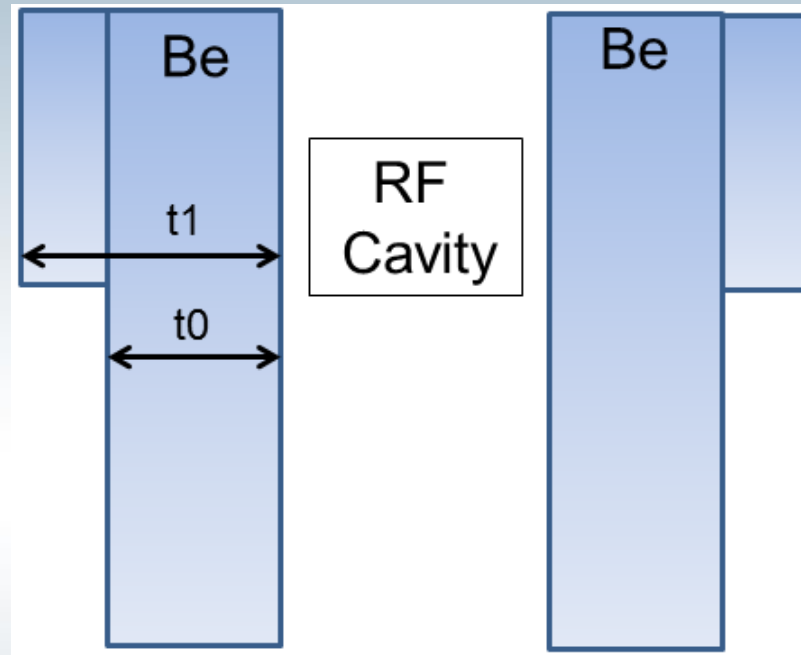
- RED: Distribution without chicane
- BLUE: New distribution for 6D Cooling. Chicane included

PreMerge: Effect of Be-window aperture



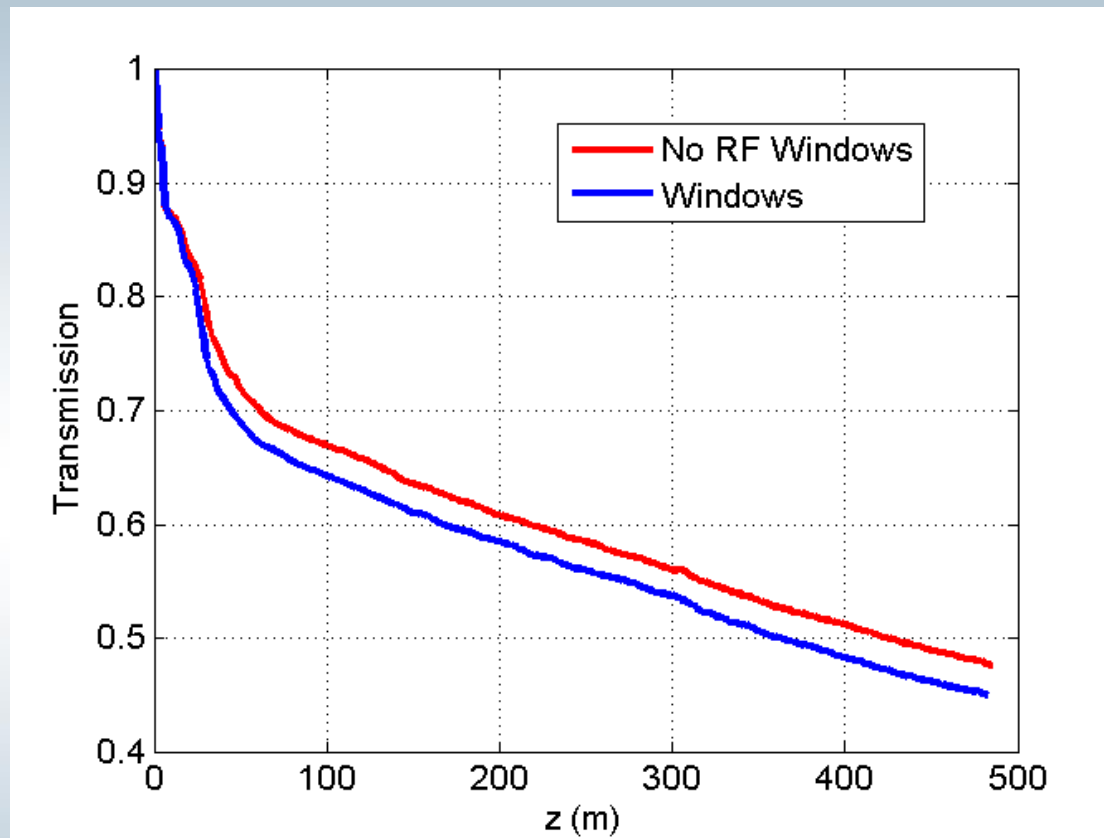
- Only 3% drop if radius is reduced from 35 cm to 30 cm
- Moving the cavities to the close orbit adds a 2%

Modeling Be Windows



Stage	f (MHz)	rWin (cm)	rStep (cm)	t0 (mm)	t1 (mm)
1	325	30	16	0.3	1.4
2	325	25	15	0.2	0.8
3	650	19	10	0.2	0.6
4	650	13.2	11.4	0.125	0.38

Effect of Be windows



- Transmission: 47% \rightarrow 45 %
- Long. Emit: 2.20 \rightarrow 2.55 mm
- Trans. Emit: 1.47 \rightarrow 1.59 mm