

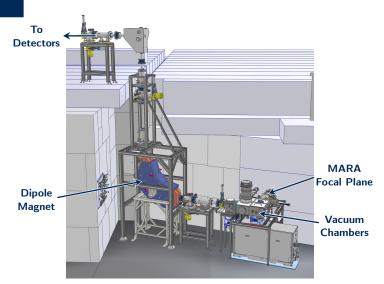
Current Status of MARA-LEB

Jorge Romero

29.06.2021



The Facility





Physics Motivation

52 Te 105 633 ns Sb 103 Sb 104

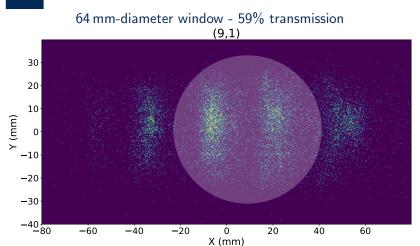
To study proton-rich nuclei close to the drip line on and around the N=Z line.

			50	Sn 99	Sn 160	Sn 101 1.97 s	Sn 102 3.8 s	5n 103 7.0 s
		In 96	In 97	ms	In 99 3.1 s	In 100 5.83 s	In 101 15.1 s	ln 102 23.3 s
48	Cd 94	Cd 95	0 ms	Cd 97	Cd 98 9.2 s	Cd 99	Cd 100 49.1 s	Cd 101
\g 92	Ag 93	Ag 9	Ag 95	Ag 96 4.44 s	Ag 97	Ag 98 47.5 s	Ag 99 2.07 m	Ag 100 2.01 m
d 91	Pd 9	Pd 93	Pd 94 9.0 s	Pd 95	Pd 96	Pd 97	Pd 98	Pd 99

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42		Mo 81	Mo 82	Mo 87	Mo 94	Mo 85				Mo 89				Mo 93	Mo 94	Mo 95	
42				3 m.	£3 s	3.2 s	19.1 s	14.1 s	8.0 m	2.11 m	5.56 h	15.49 m	14.53	4.0 ky	9.15	15.84	
		Nb 79	Nb 80	Nb 81	Nb 8Z	Nb 83	Nb 84	Nb 85	Nb 86	Nb 87	Nb 88	Nb 89	Nb 90	Nb 91	Nb 92	Nb 93	Nb 94
		?	?	<44 ns	d ms	3.9 s	9.8 s	20.5 s	88 s	3.7 m	14.50 m	2.03 h	14.60 h	680 y	34.7 My	100.	20.4 ky
40	Zr 77	Zr 78	Zr 79	Zr 8	Zr 81	Zr 82	Zr 83	Zr 84	Zr 85	Zr 86	Zr 87	Zr 88	Zr 89	Zr 90	Zr 91	Zr 92	Zr 93
40			56 ms	.6 s	5.5 s	32 s	42 s	25.8 m	7.86 m	16.5 h	1.68 h	83.4 d	78.41 h	51.45	11.22	17.15	1.61 My
Y 75	Y 76	Y 77	Y 79	Y 79	Y 80	Y 81	Y 82	Y 83	Y 84	Y 85	Y 86	Y 87	Y 88	Y 89	Y 90	Y 91	Y 92
		63 ms	ms	14.8 s	30.1 s	70.4 s	8.30 s	7.08 m	39.5 m	2.68 h	14.74 h	79.8 h	106.626 d	100.	64.00 h	58.51 d	3.54 h



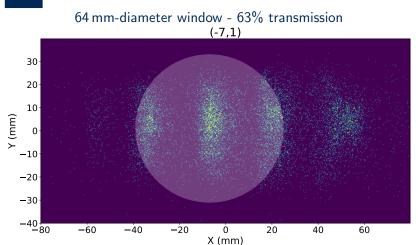
Gas Cell Window



Recoil image at MARA's focal plane, tuned at Charge State 26.5



Gas Cell Window



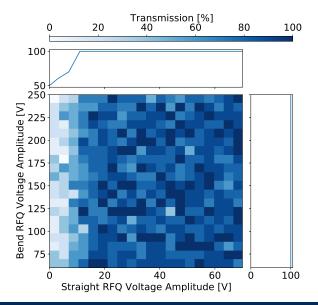
Recoil image at MARA's focal plane, tuned at Charge State 27



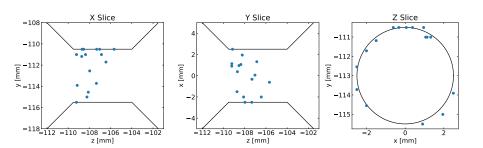




Transmission







Losses are concentrated in between the chamfers.

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Electrode Redesign

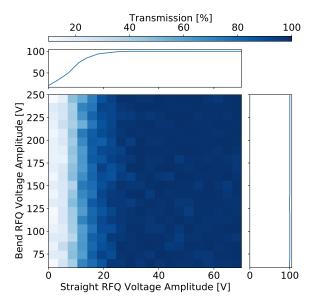




Old vs New Chamfer Geometry



New Transmission Results





New Transmission Results

