



JYVÄSKYLÄN YLIOPISTO
UNIVERSITY OF JYVÄSKYLÄ

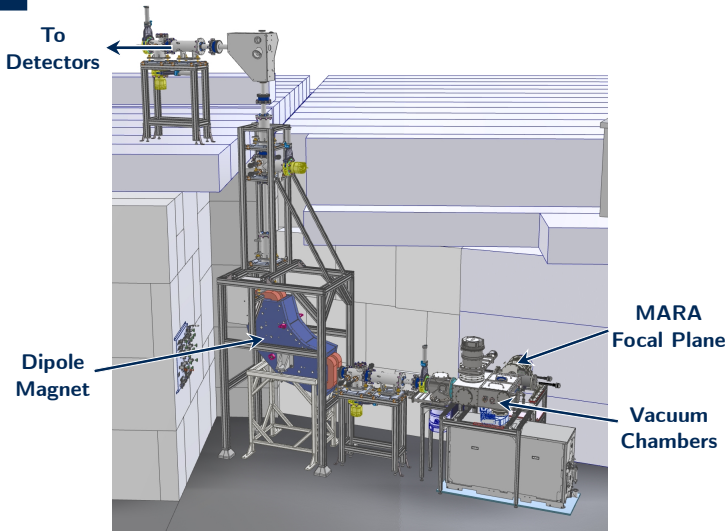
Current Status of MARA-LEB

Jorge Romero

29.06.2021



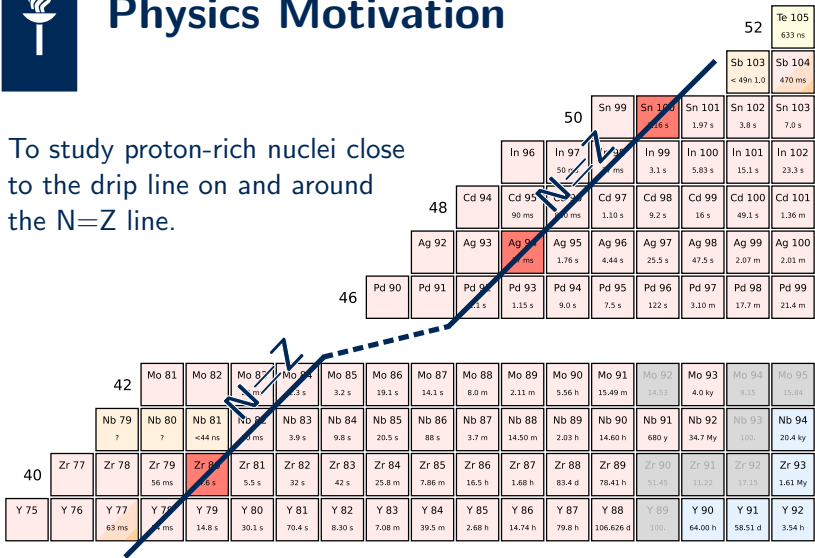
The Facility





Physics Motivation

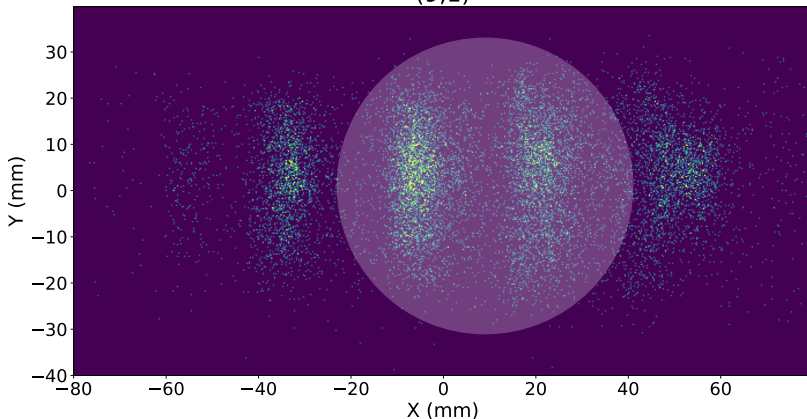
To study proton-rich nuclei close to the drip line on and around the $N=Z$ line.





Gas Cell Window

64 mm-diameter window - 59% transmission
(9,1)

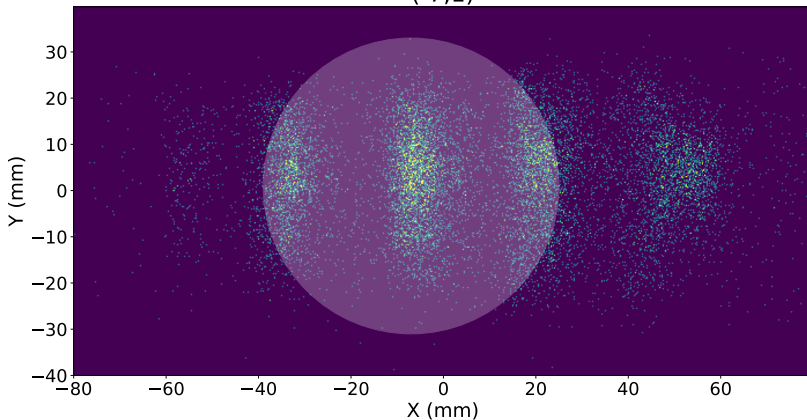


Recoil image at MARA's focal plane, tuned at Charge State 26.5



Gas Cell Window

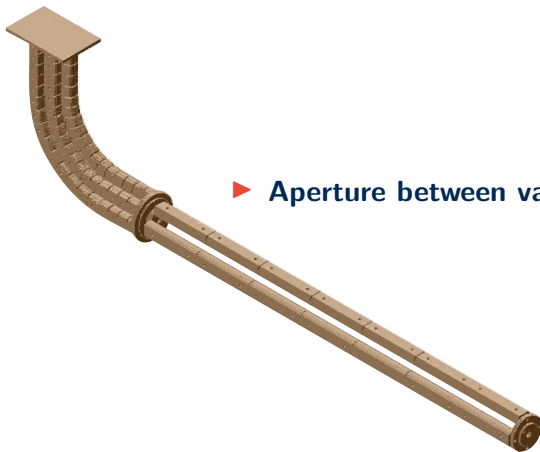
64 mm-diameter window - 63% transmission
(-7,1)



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



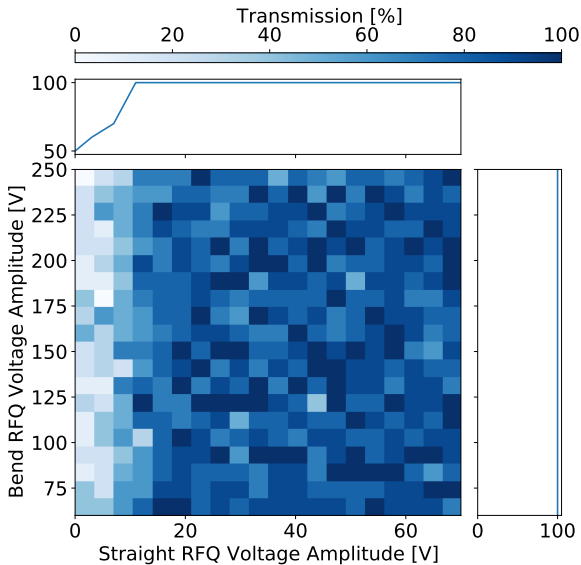
RFQ



▶ Aperture between vacuum chambers

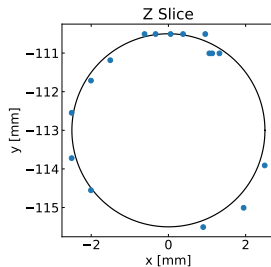
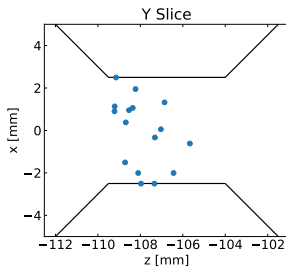
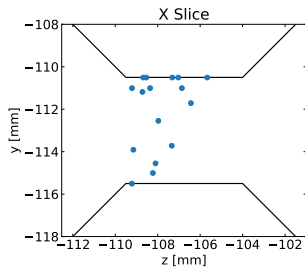


Transmission





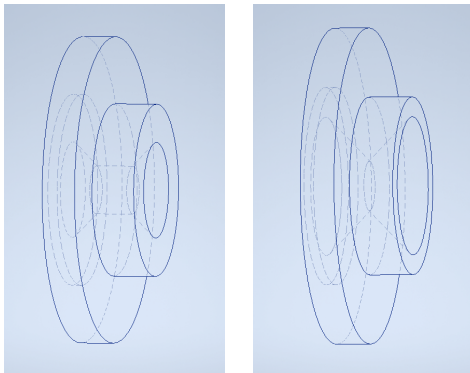
Losses



Losses are concentrated in between the chamfers.



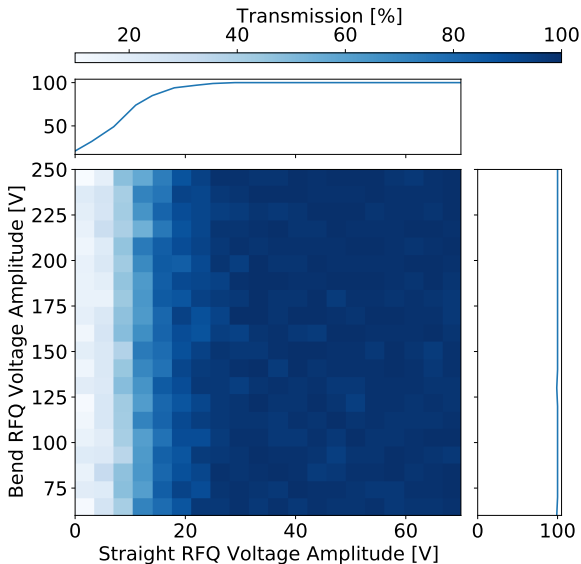
Electrode Redesign



Old vs New Chamfer Geometry

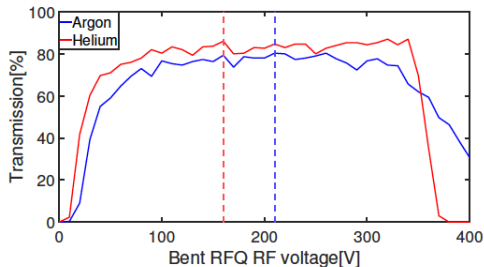


New Transmission Results





New Transmission Results



J. Liimatainen

