

eHD in UITF

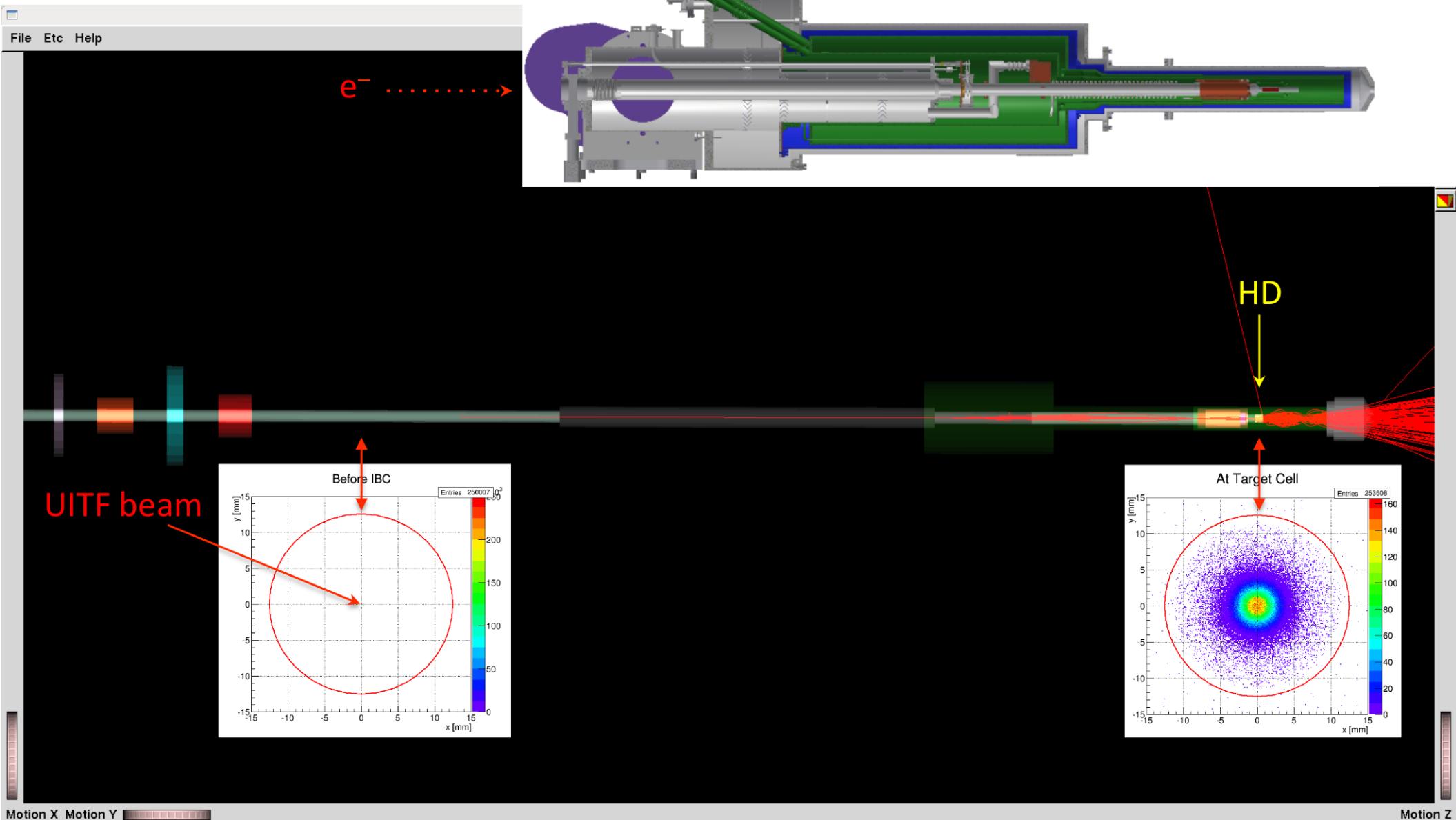
Update: Overcoming Beam Spot Issues and an
Early Look at Beam Tuning

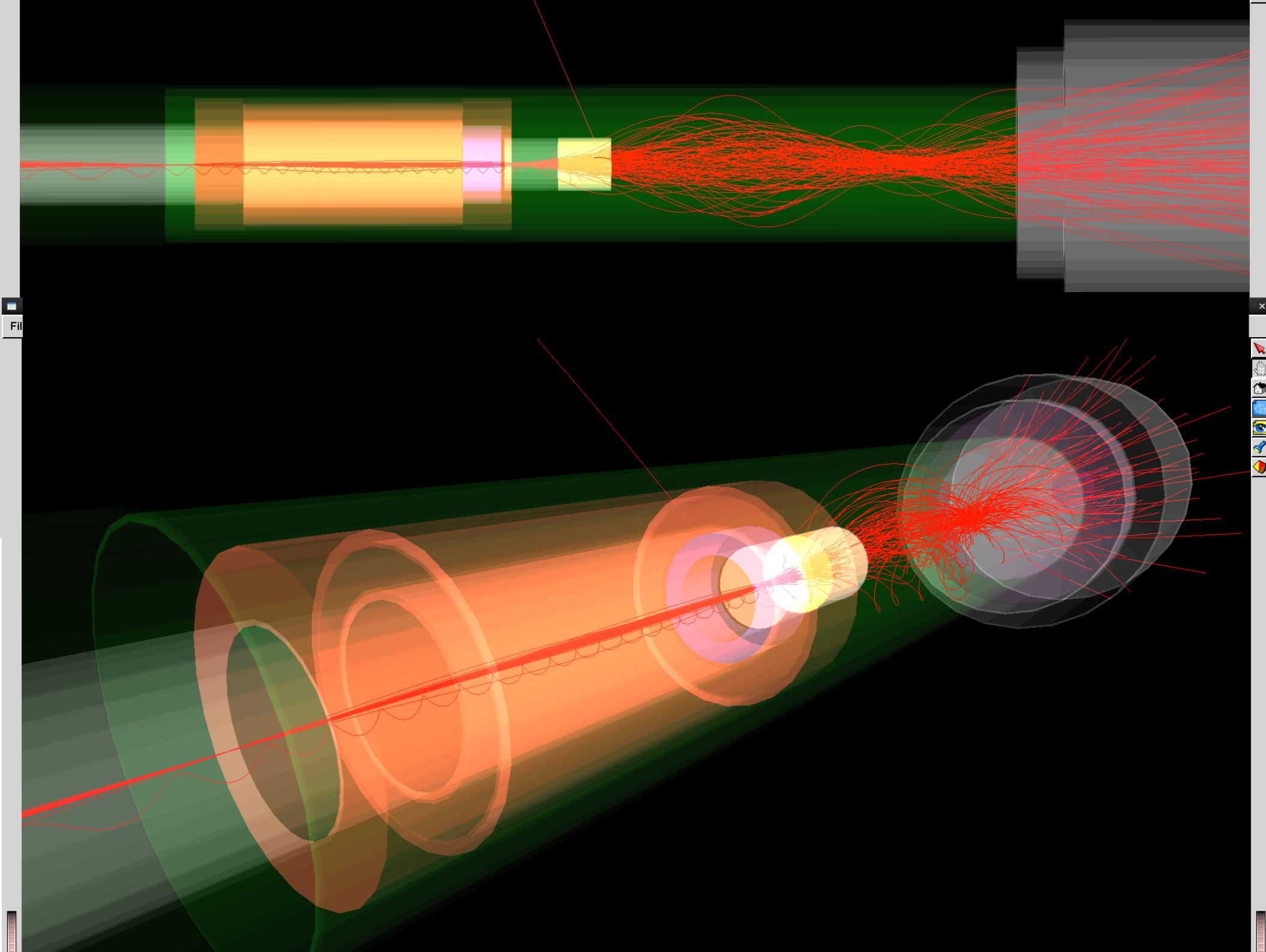
C. Hanretty (on behalf of the HDice Group)
15Dec2015

Beam Spot on HD

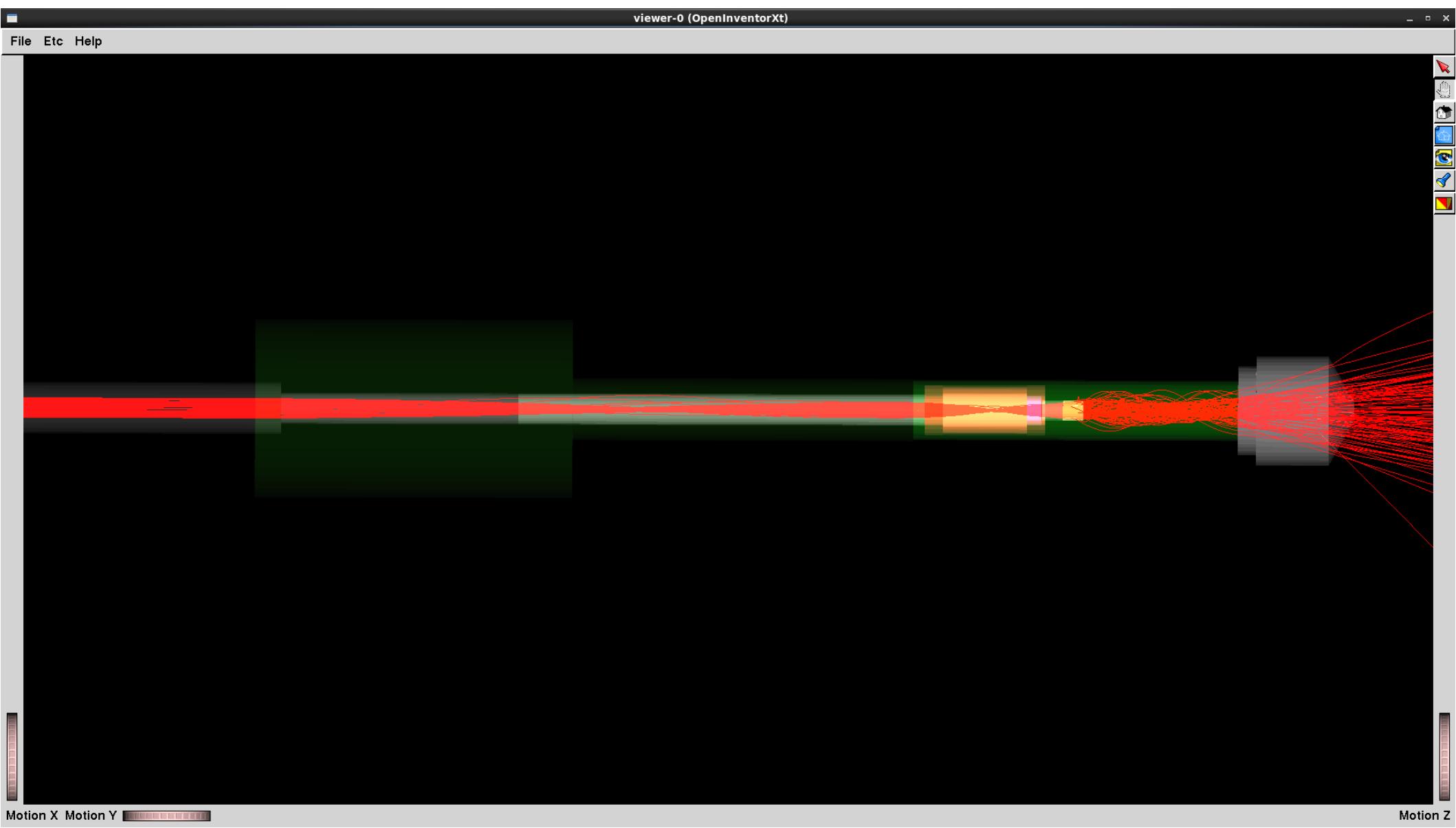


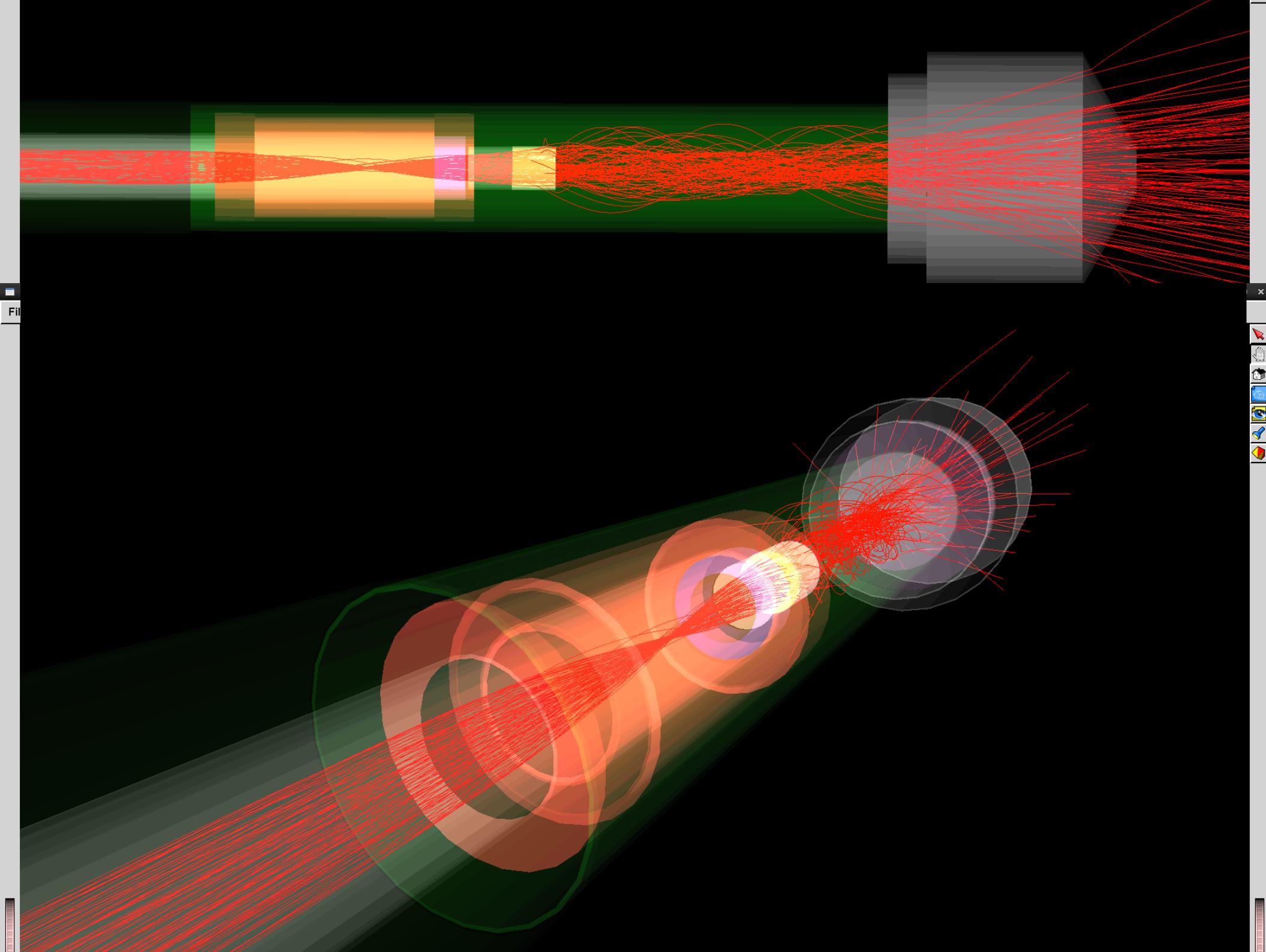
Pencil beam into IBC with normal orientation





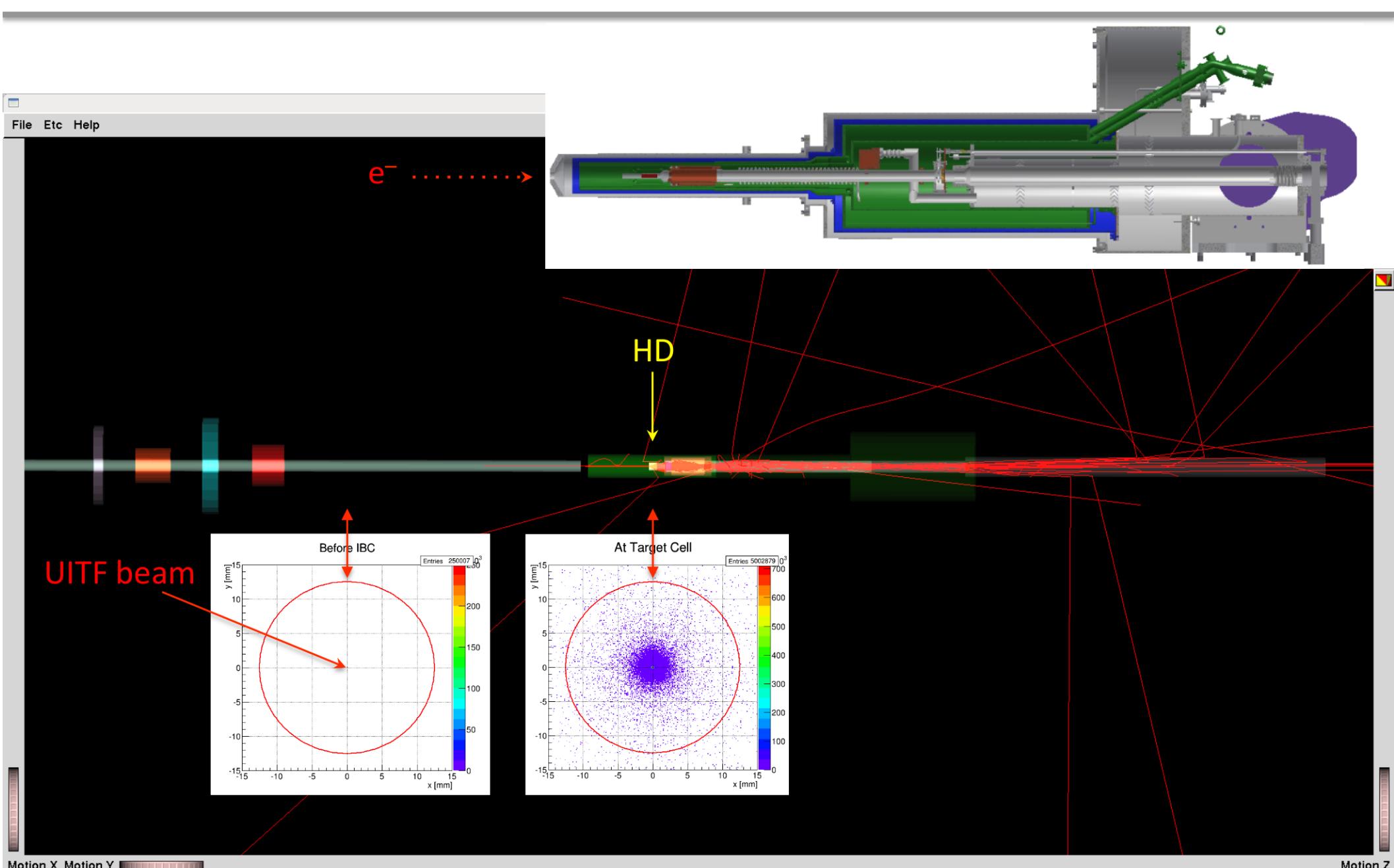
Pseudo-Rastered Beam with Normal IBC Orientation

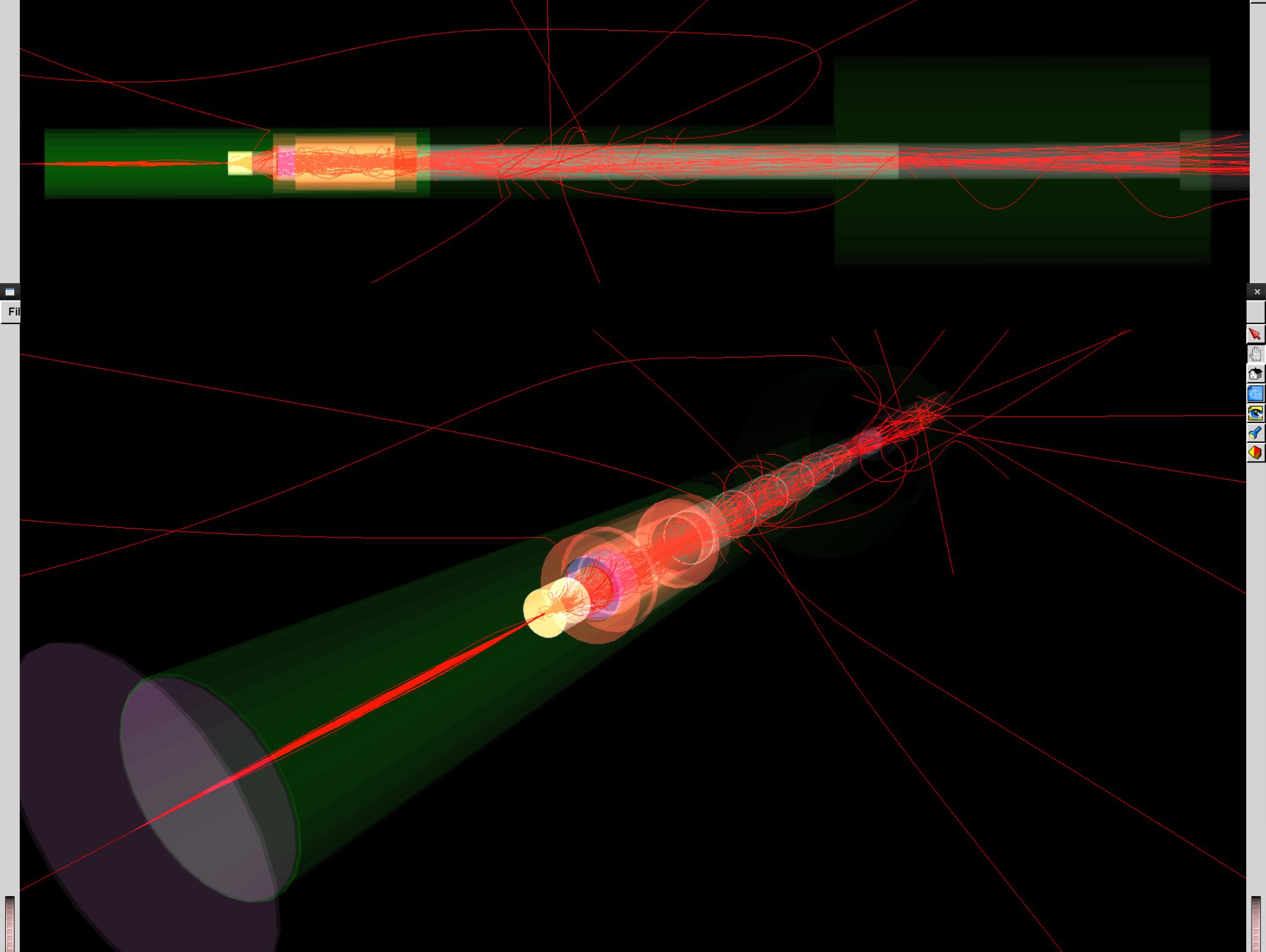




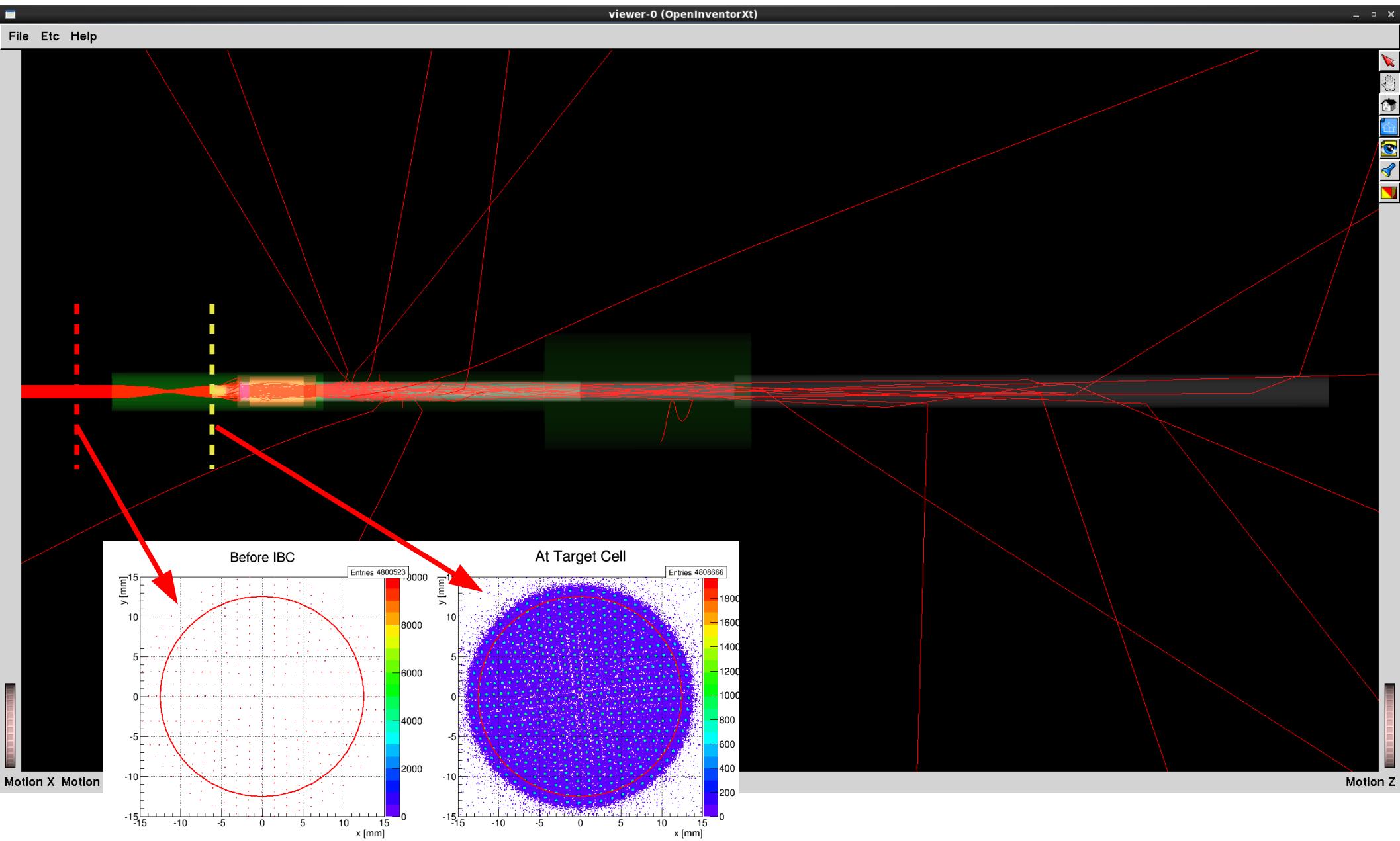


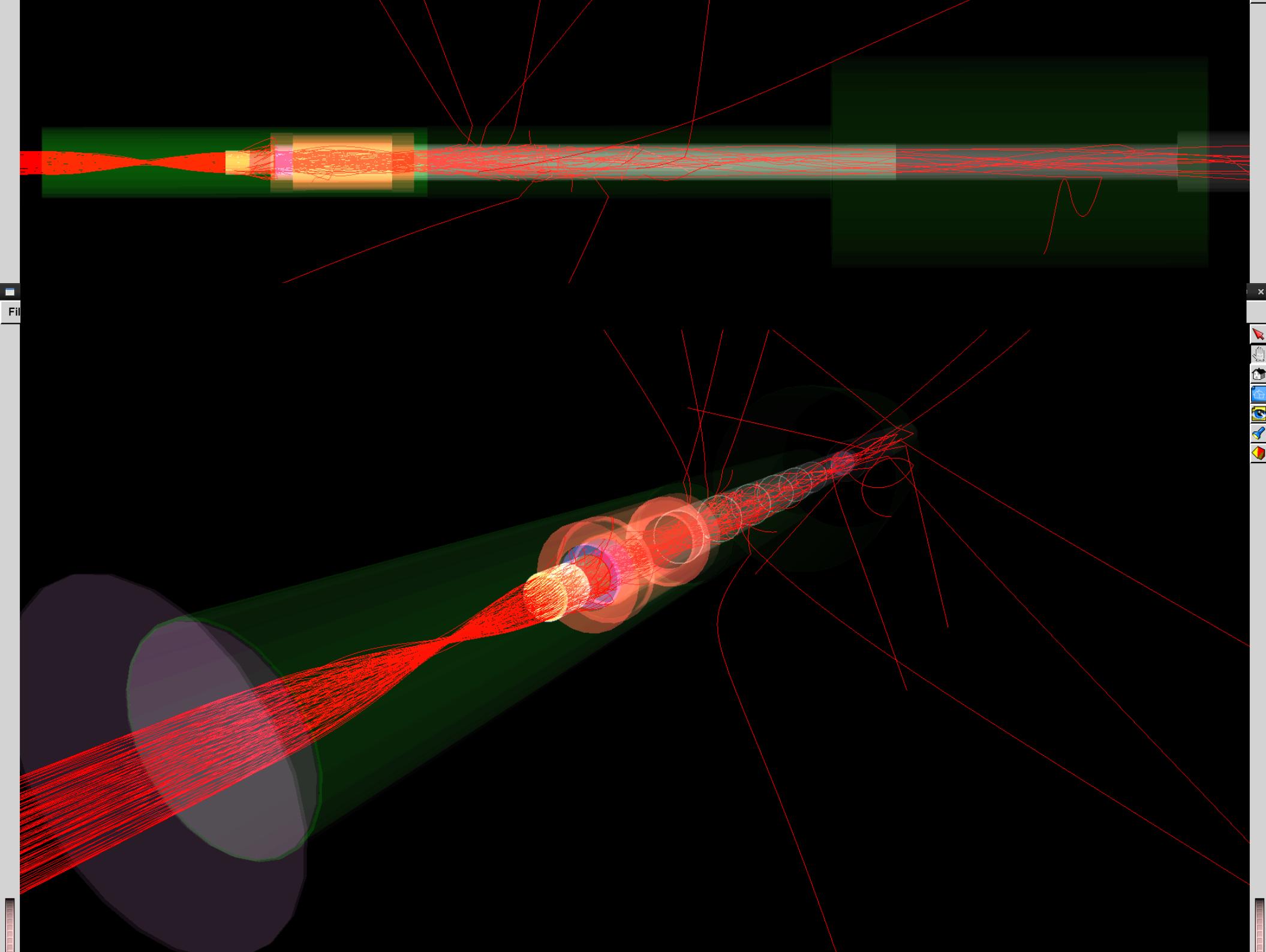
Pencil beam into IBC with reverse orientation





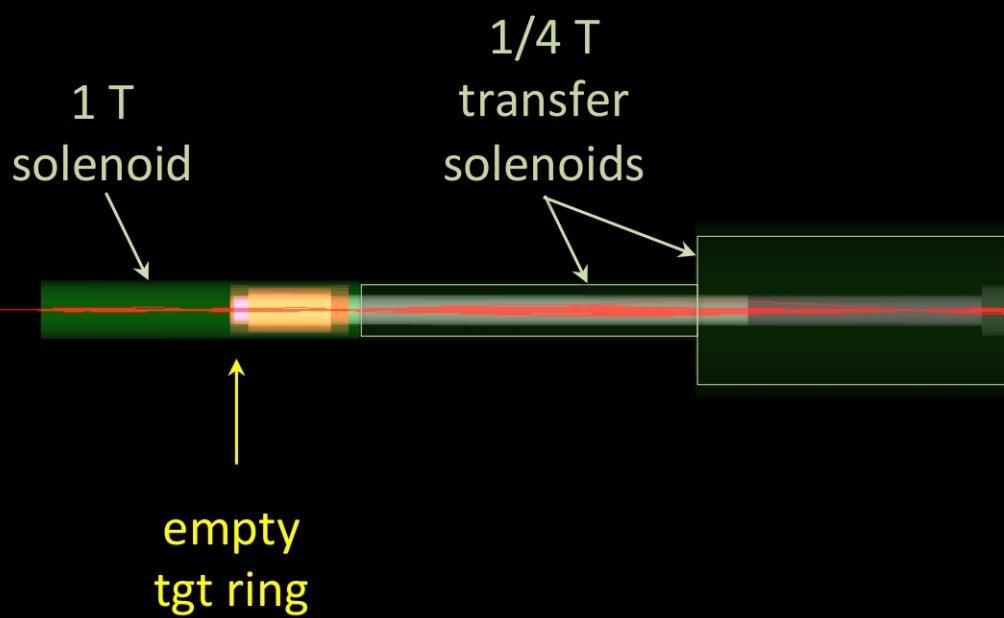
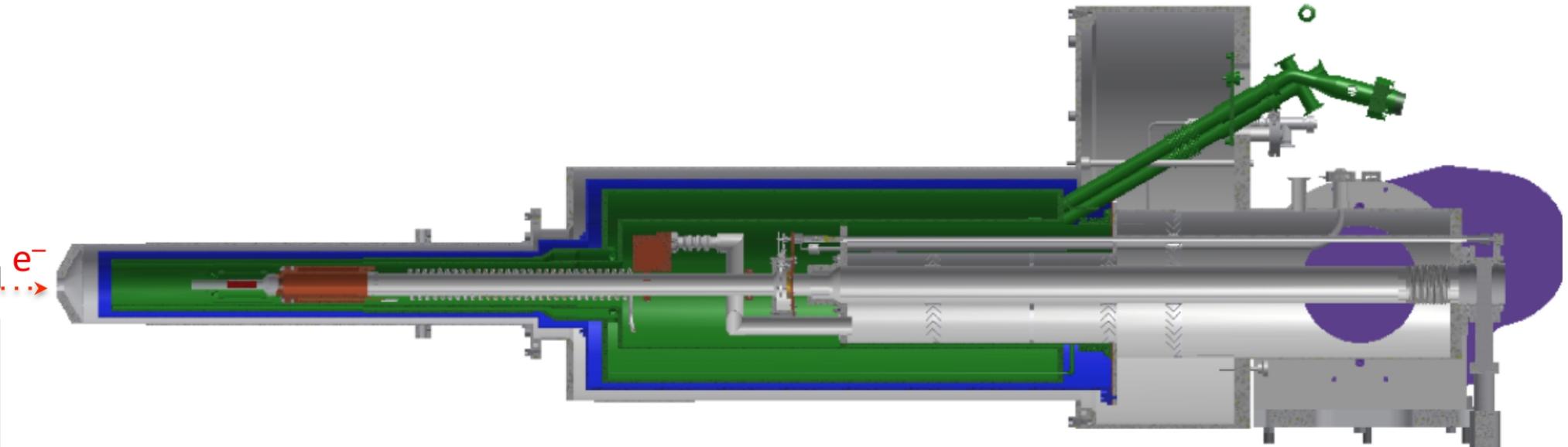
Pseudo-Rastered Beam with Reversed IBC

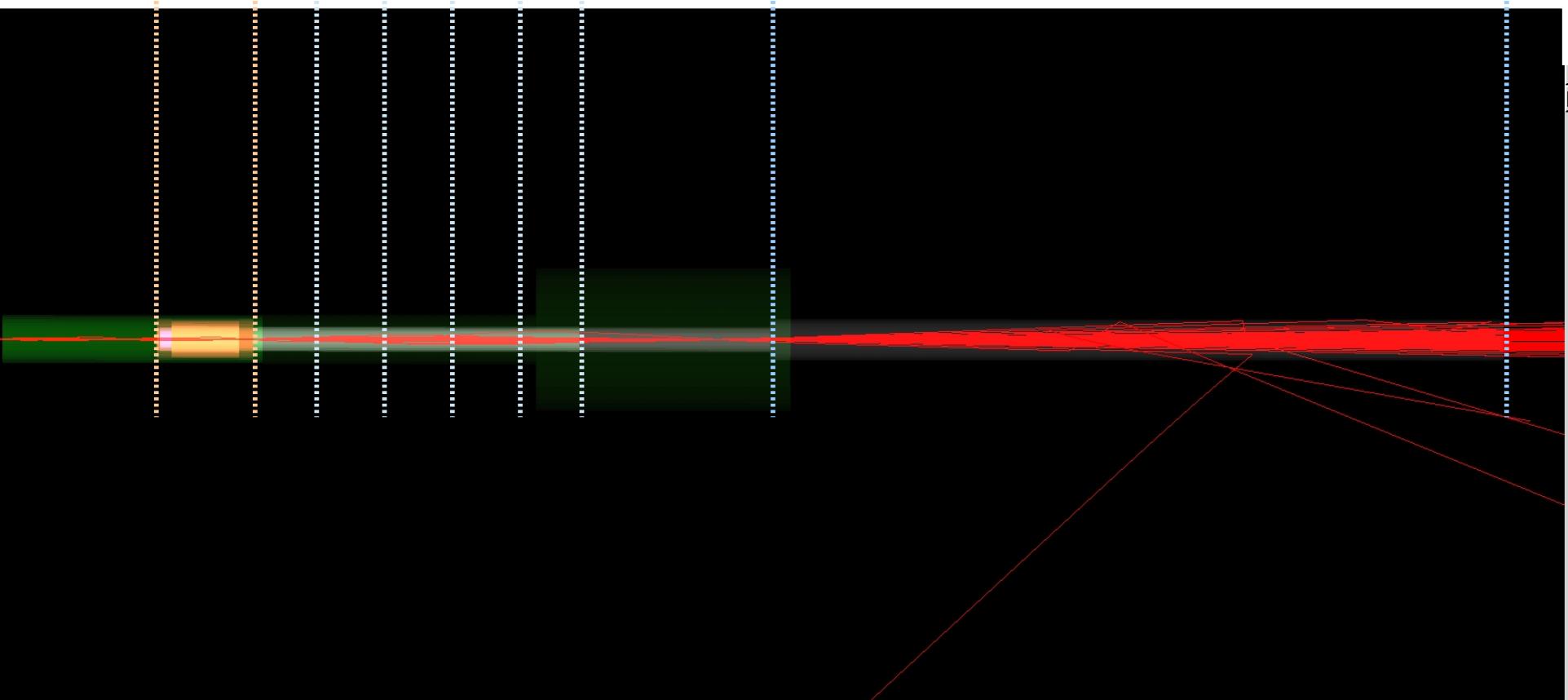
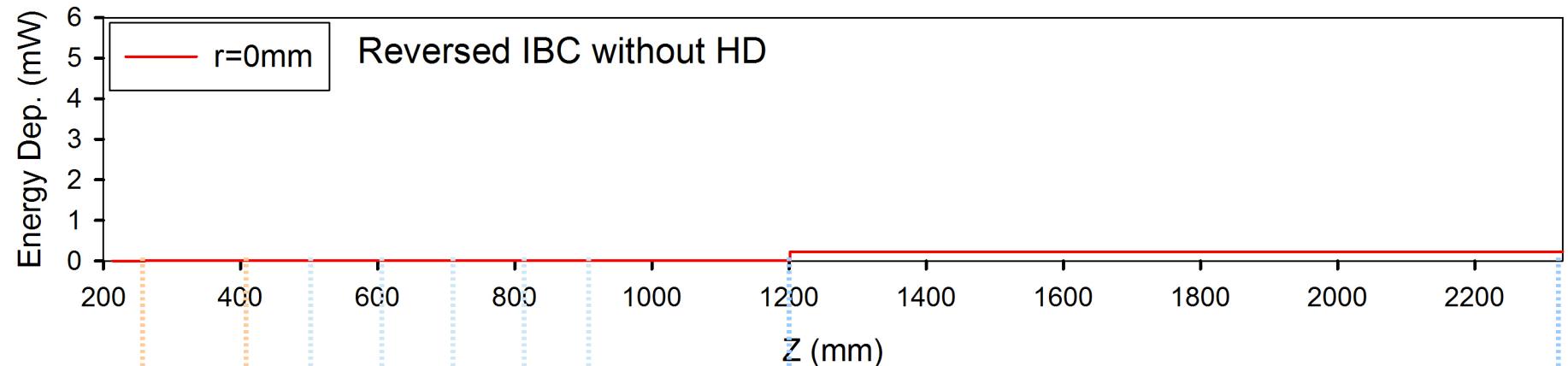




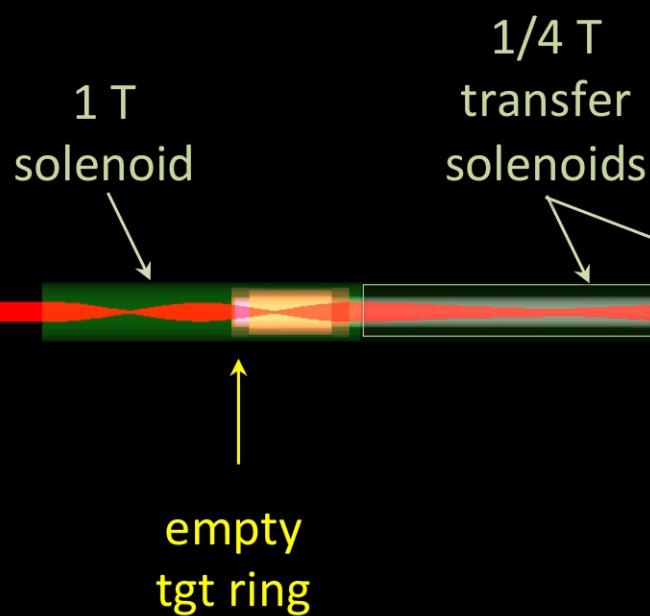
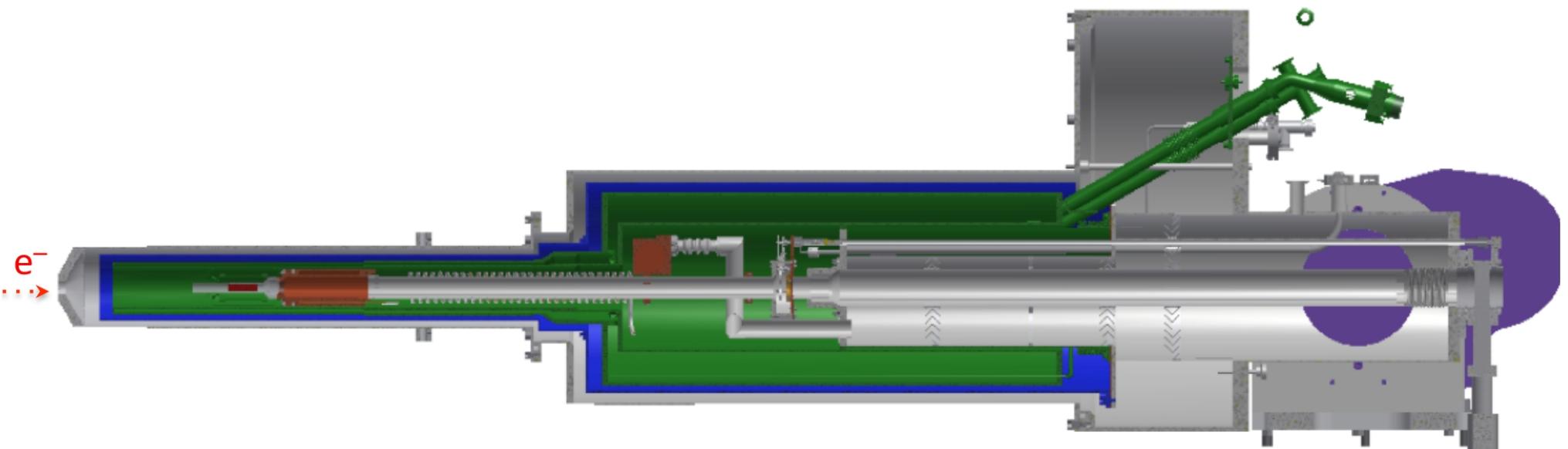
Beam Tuning/Alignment

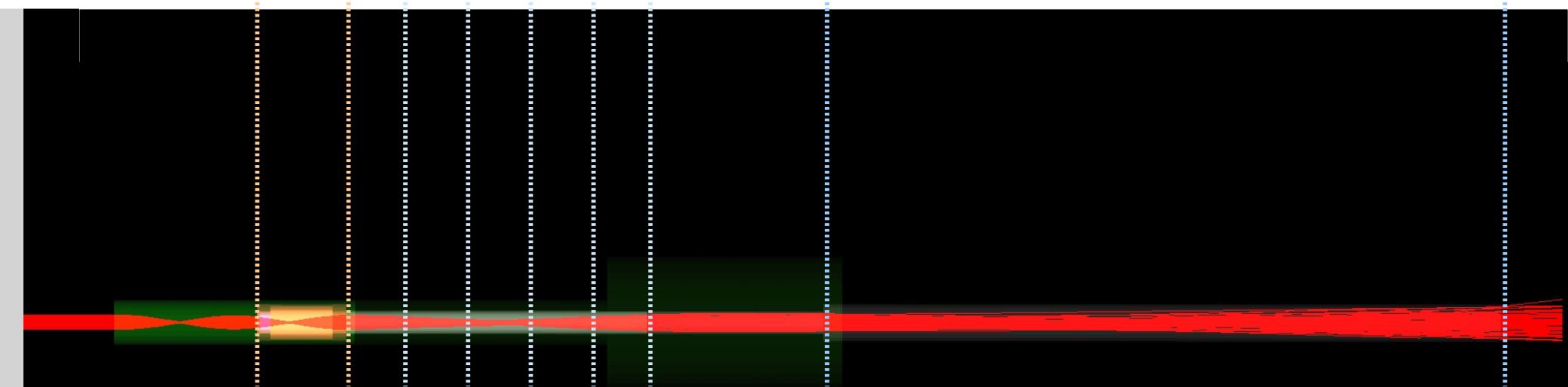
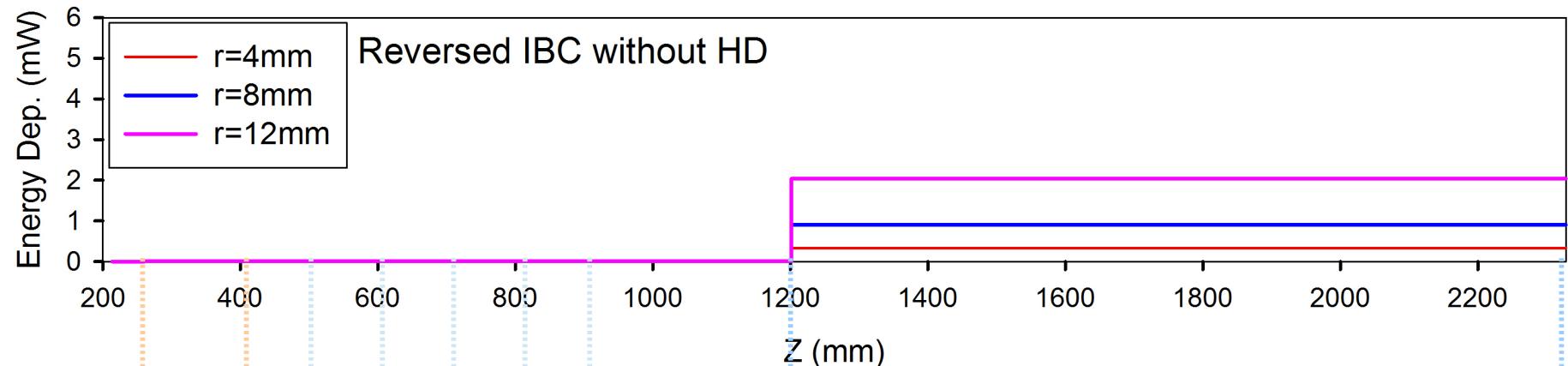
Beam alignment – I. pencil beam – no target



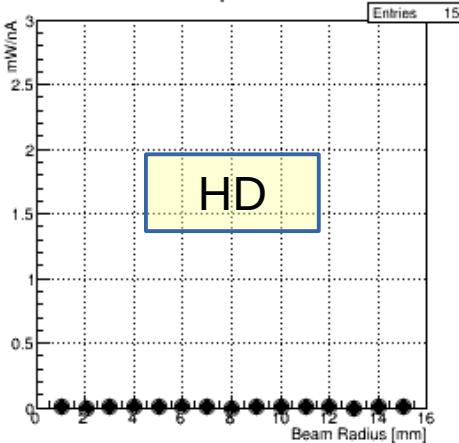


Beam alignment – II. rastered beam – no target

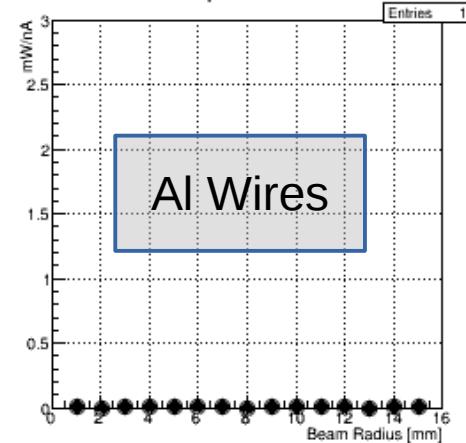




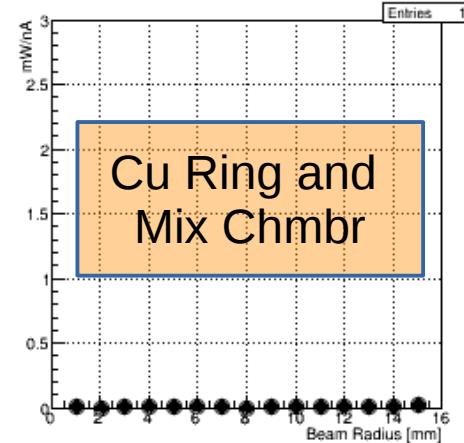
Heat dumped into HD



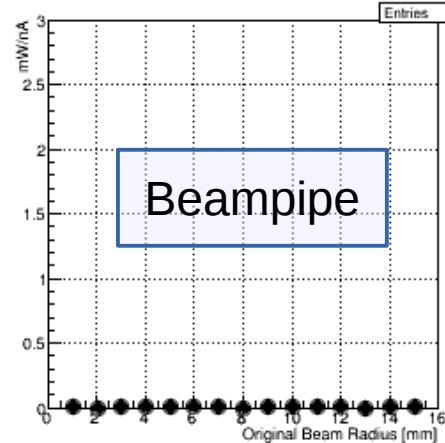
Heat dumped into Al Wires



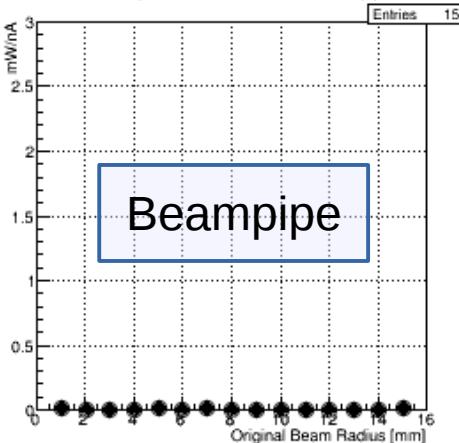
Heat dumped into Cu Ring and Mixing Chamber



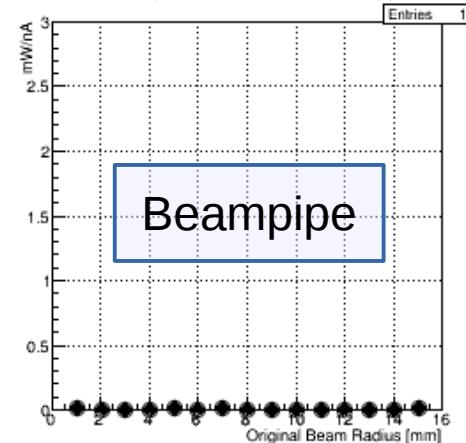
Heat dumped into Section 1 of IBC Beampipe



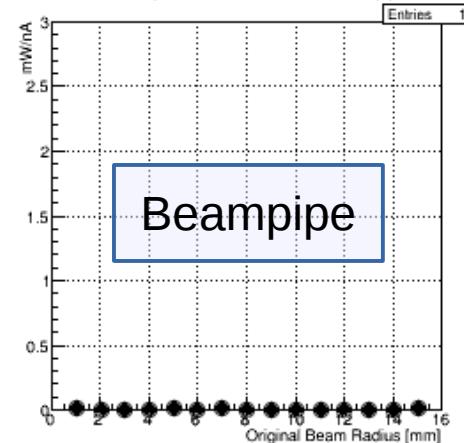
Heat dumped into Section 2 of IBC Beampipe



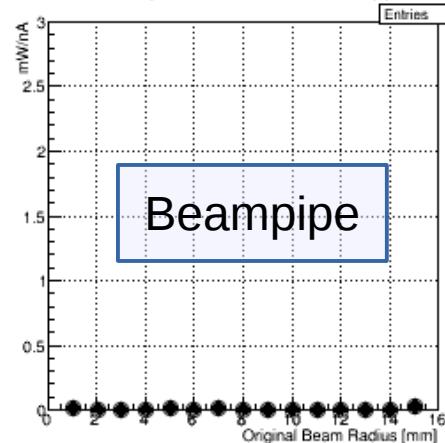
Heat dumped into Section 3 of IBC Beampipe



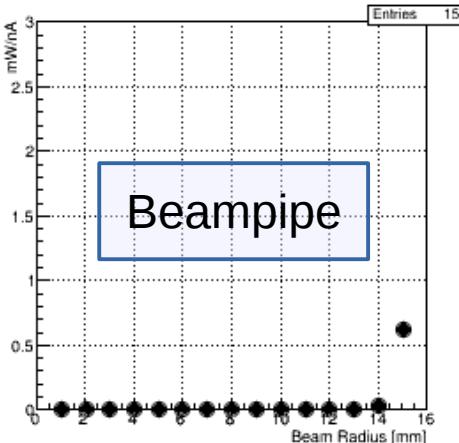
Heat dumped into Section 4 of IBC Beampipe



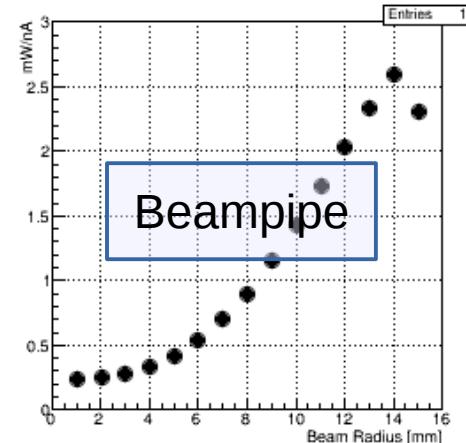
Heat dumped into Section 5 of IBC Beampipe



Heat dumped into remaining 302.09mm section of IBC Beampipe

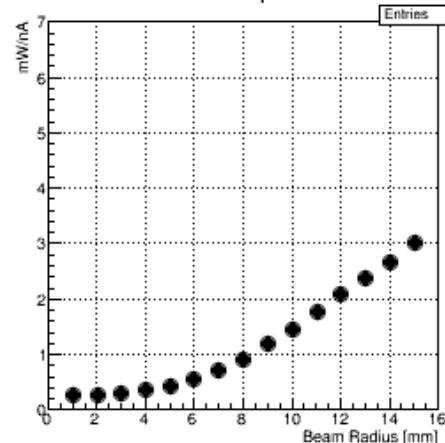


Heat dumped into largest IBC Beampipe

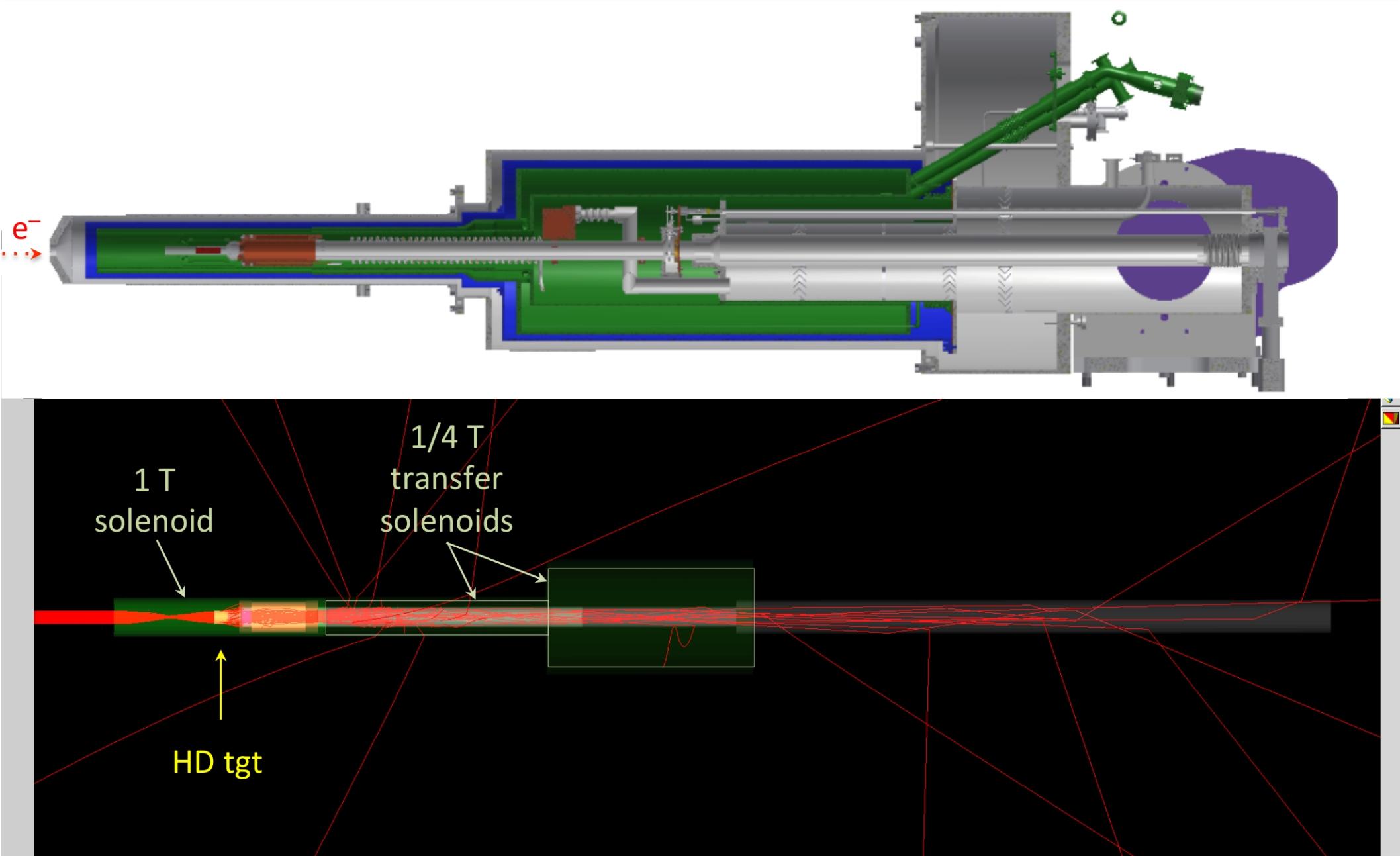


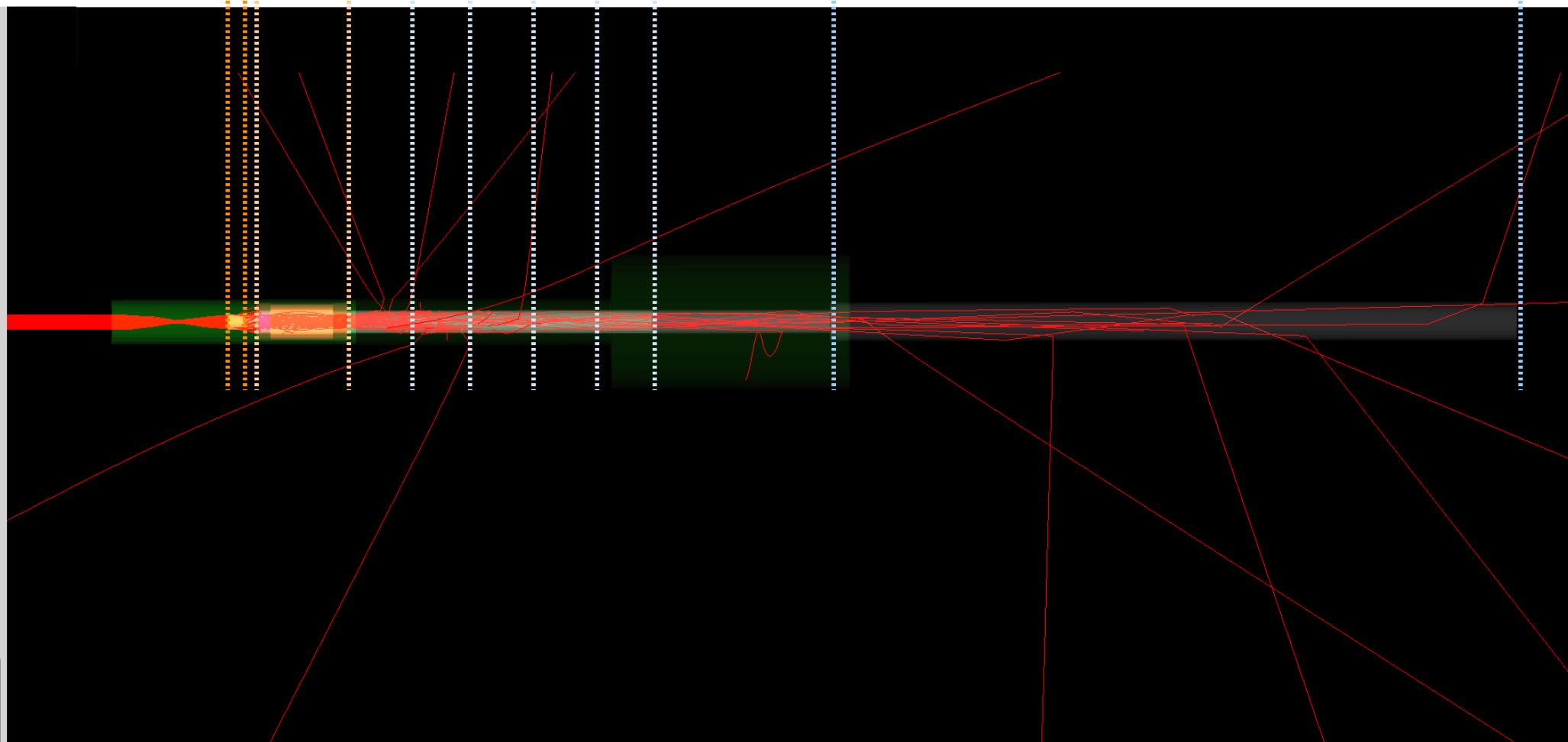
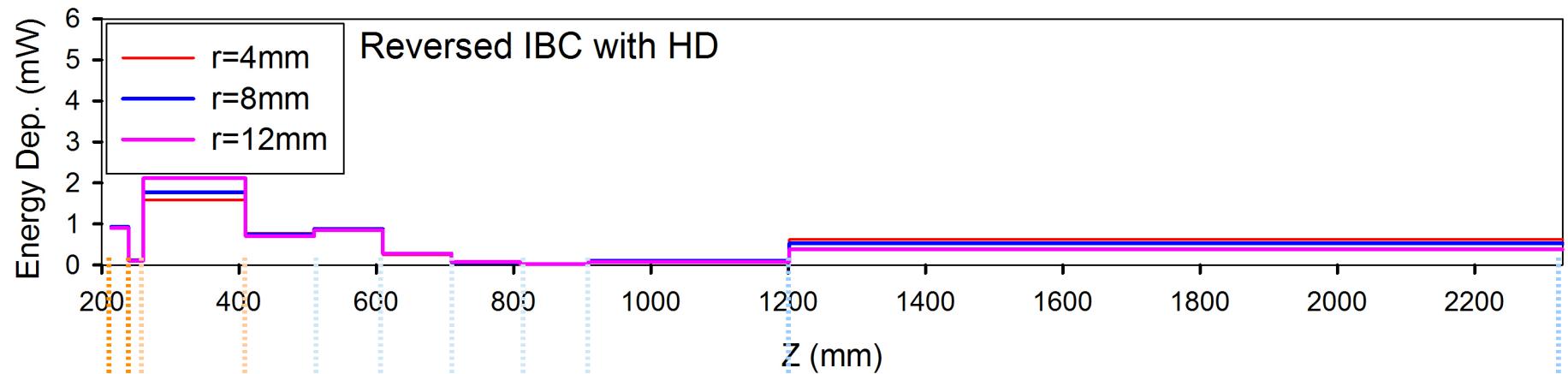
Heat loads
(mW/nA) for
Rastered Beam,
Reversed IBC,
No Target

Total Heat Dumped Into IBC

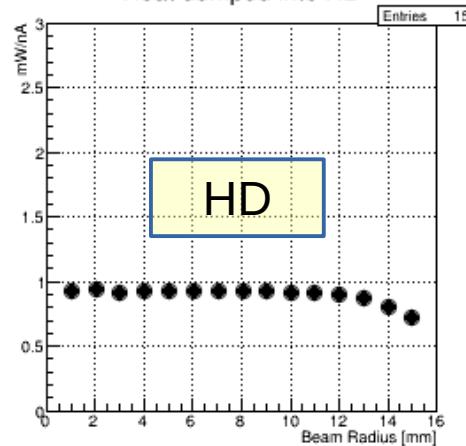


rastered beam on target

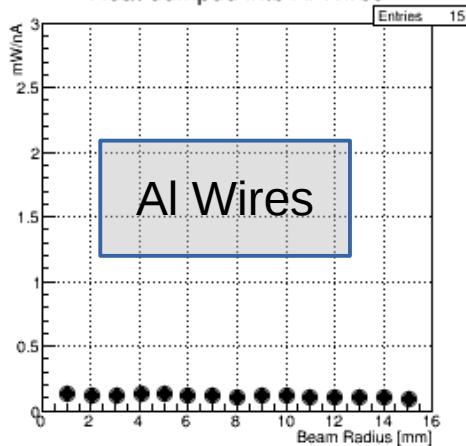




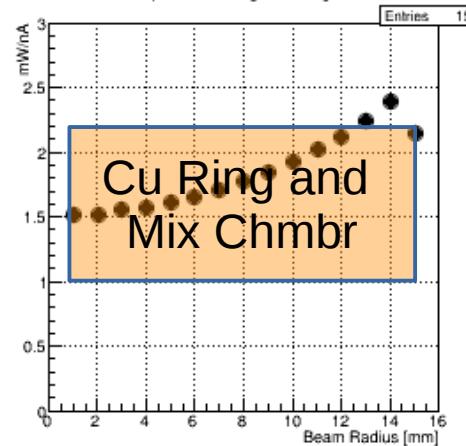
Heat dumped into HD



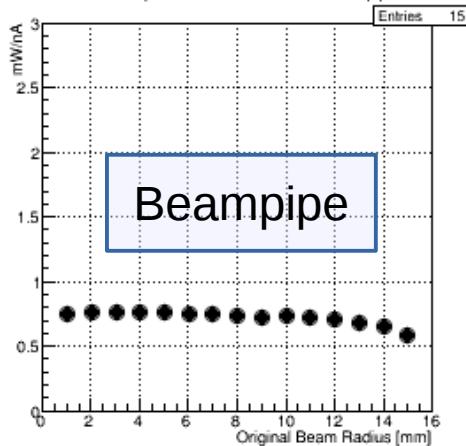
Heat dumped into Al Wires



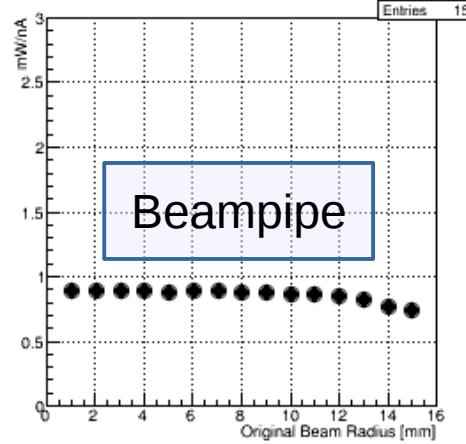
Heat dumped into Cu Ring and Mixing Chamber



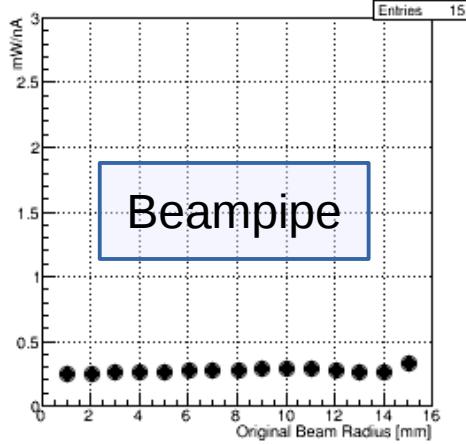
Heat dumped into Section 1 of IBC Beampipe



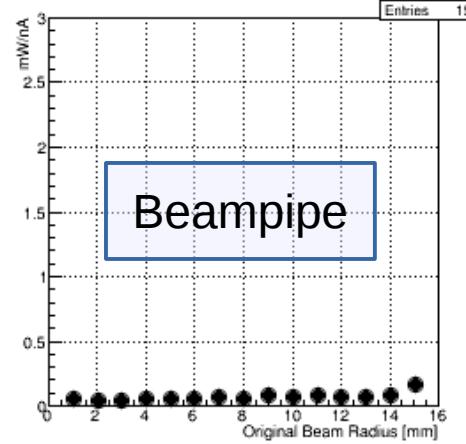
Heat dumped into Section 2 of IBC Beampipe



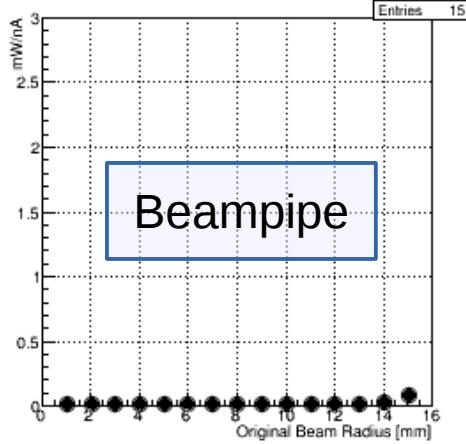
Heat dumped into Section 3 of IBC Beampipe



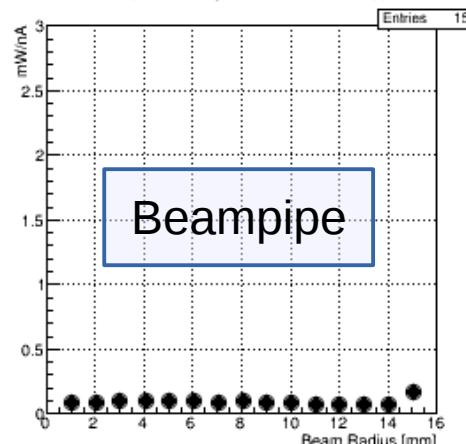
Heat dumped into Section 4 of IBC Beampipe



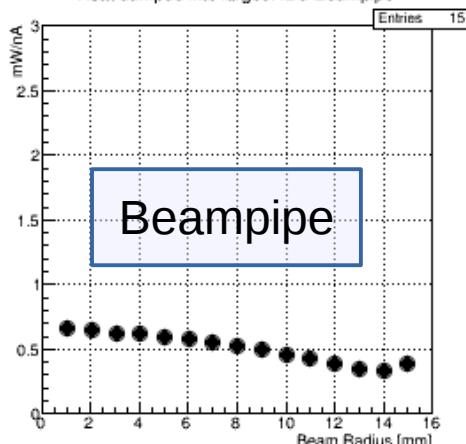
Heat dumped into Section 5 of IBC Beampipe



Heat dumped into remaining 262.09mm section of IBC Beampipe



Heat dumped into largest IBC Beampipe



Heat loads
(mW/nA) for
Rastered Beam,
Reversed IBC,
Target Present

