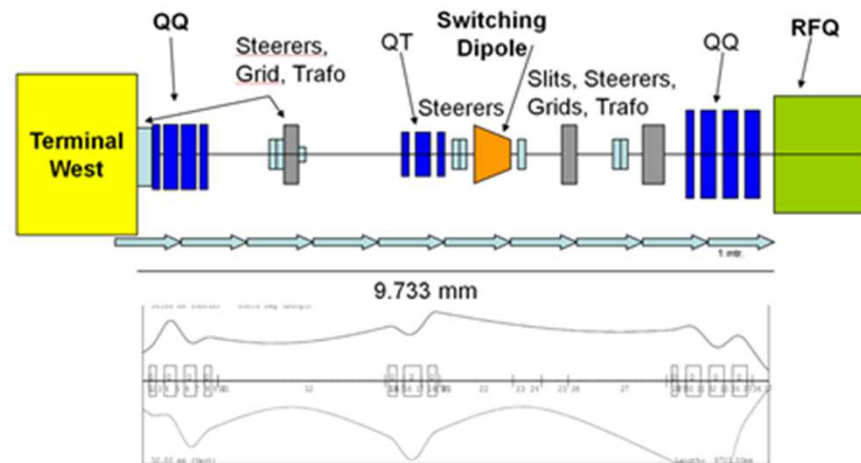
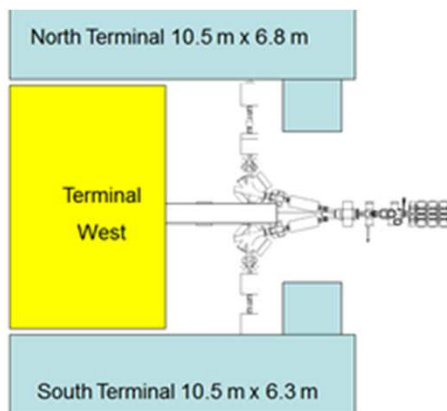


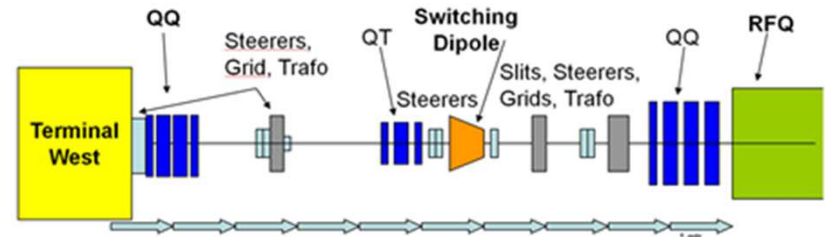
Compact-LEBT – Status

- Design of the LEBT in progress, „preferred“ solution proposed, other solutions under investigation.
- Preferred solution: Length appr. 9.7 m , two focusing magnets up to switching magnet (quadrupole/solenoid not yet decided): Appropriate for various alternative scenarios of RFQ (unchanged or redesigned), adjustable for various beam emittances from ion source.
- Measurements at North terminal with Uranium und Tantalum June-October 2013, used for simulations for proposed LEBT-design!



Design of the LEBT

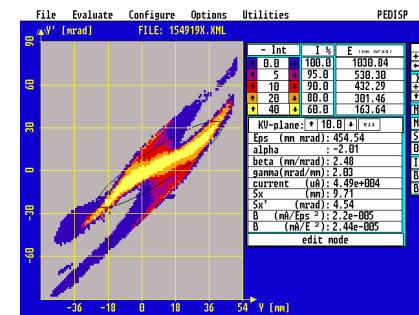
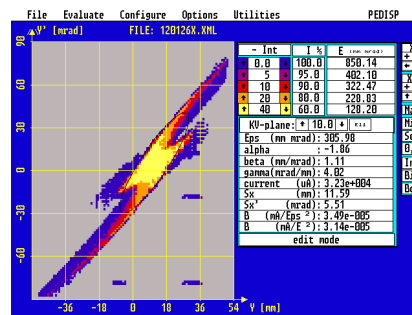
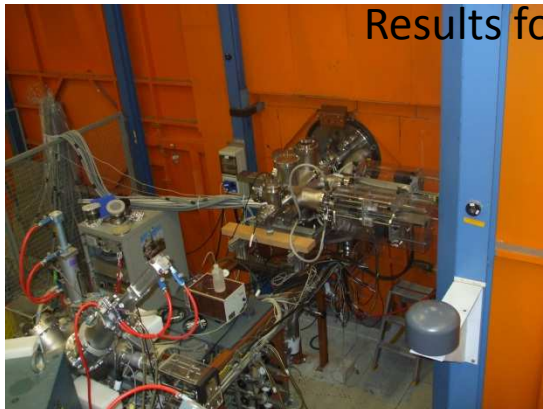
Design: „*Ion Source - Quadrupole Quartet - beam diagnostics - quadrupole triplet - switching magnet - beam diagnostics - quadrupole quartet - HST*“.



Latest proposal: Use existing quartet before RFQ, and new quartet behind source, save money as a cheaper power supply can be used. Alternatively: existing sc solenoid could be used, additional simulations.

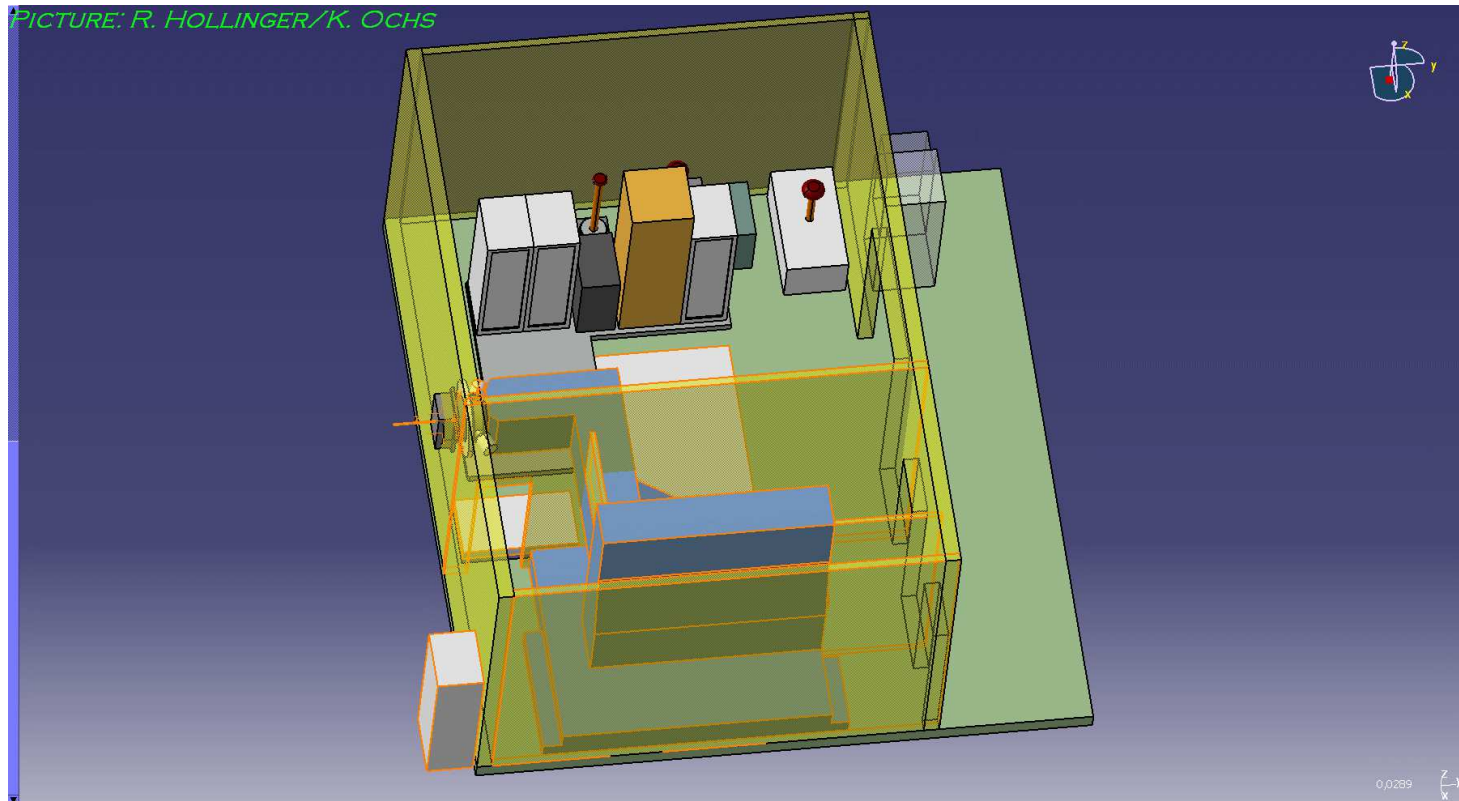
Measurements of uranium beam emittance directly at North Terminal, Oct. 2013. HOSTI-Emittance Measurement Device at North Terminal,

Results for medium and high uranium current (35 nA, 55 mA)



Terminal West

- Dedicated Terminal exclusively for uranium beam
- General layout exists (LOIS)
- Integrated service area
- All power supplies integrated in the Faraday room
- No extension within the basement, only ground floor



Schedule Compact-LEBT

	2014				2015				2016				2017			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Integration Terminal West in BH1		■	■													
Design Terminal West				■	■	■										
Procurement terminal and components				■	■	■	■									
Design LEBT	■	■	■	■												
Procurement LEBT components				■	■	■	■									
Terminal assembly							■	■								
Installations in terminal									■	■						
LEBT assembly									■	■						
Commissioning											■	■				