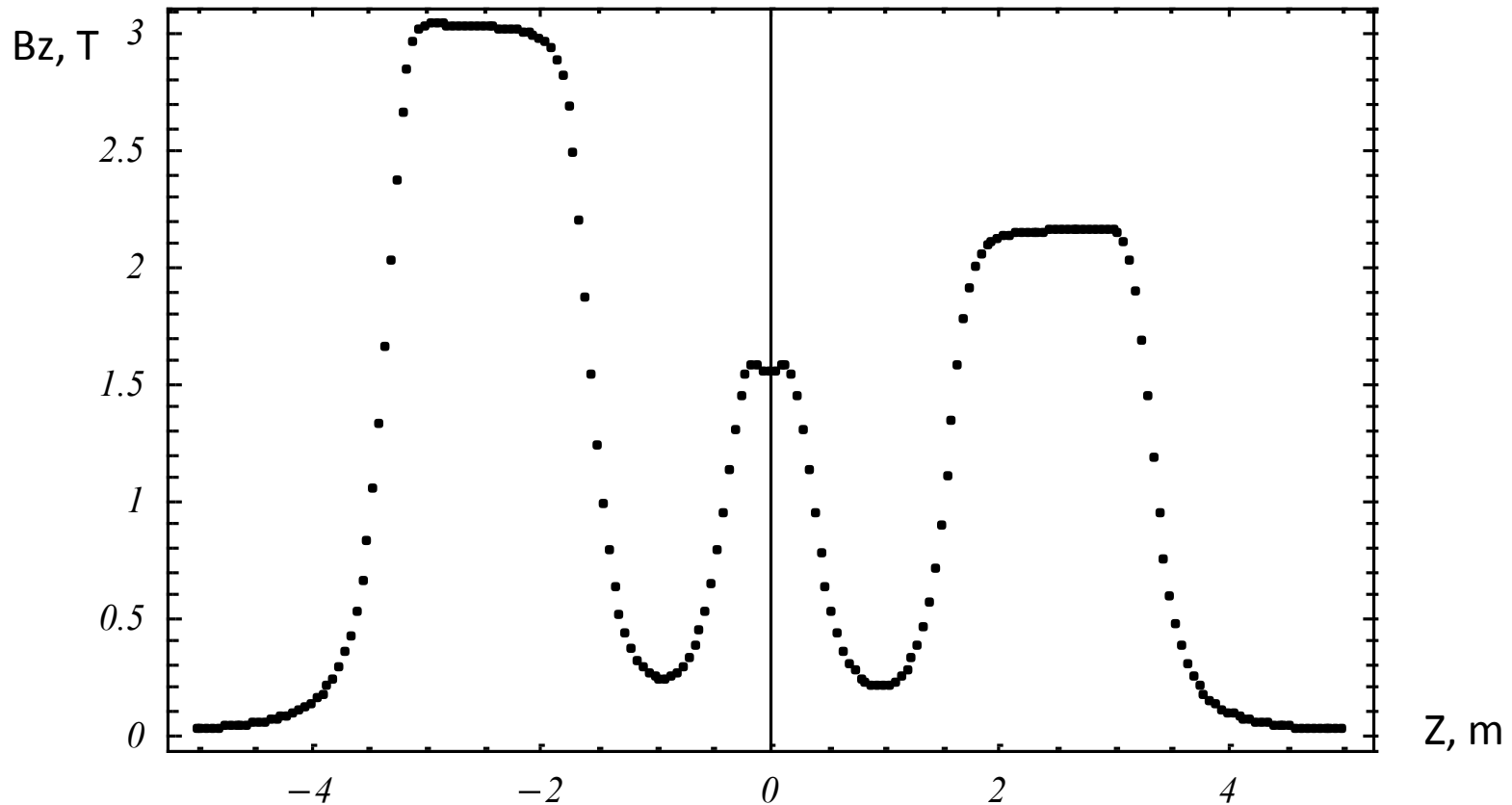


Towards final optics without any Ms

J. Pasternak, IC/RAL-STFC

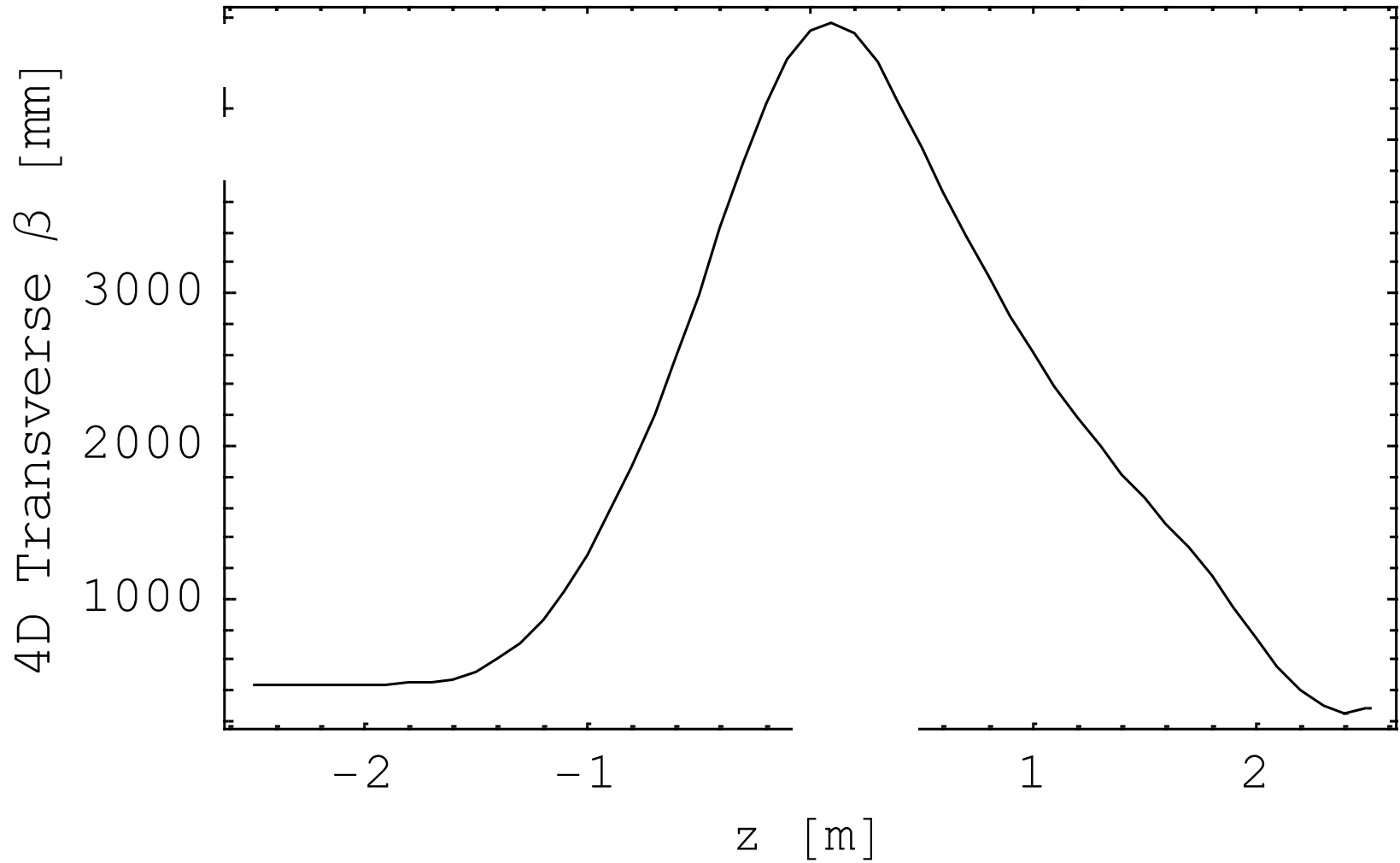
30/06/2016

Ao Liu's optics (one presented at Readiness Review)

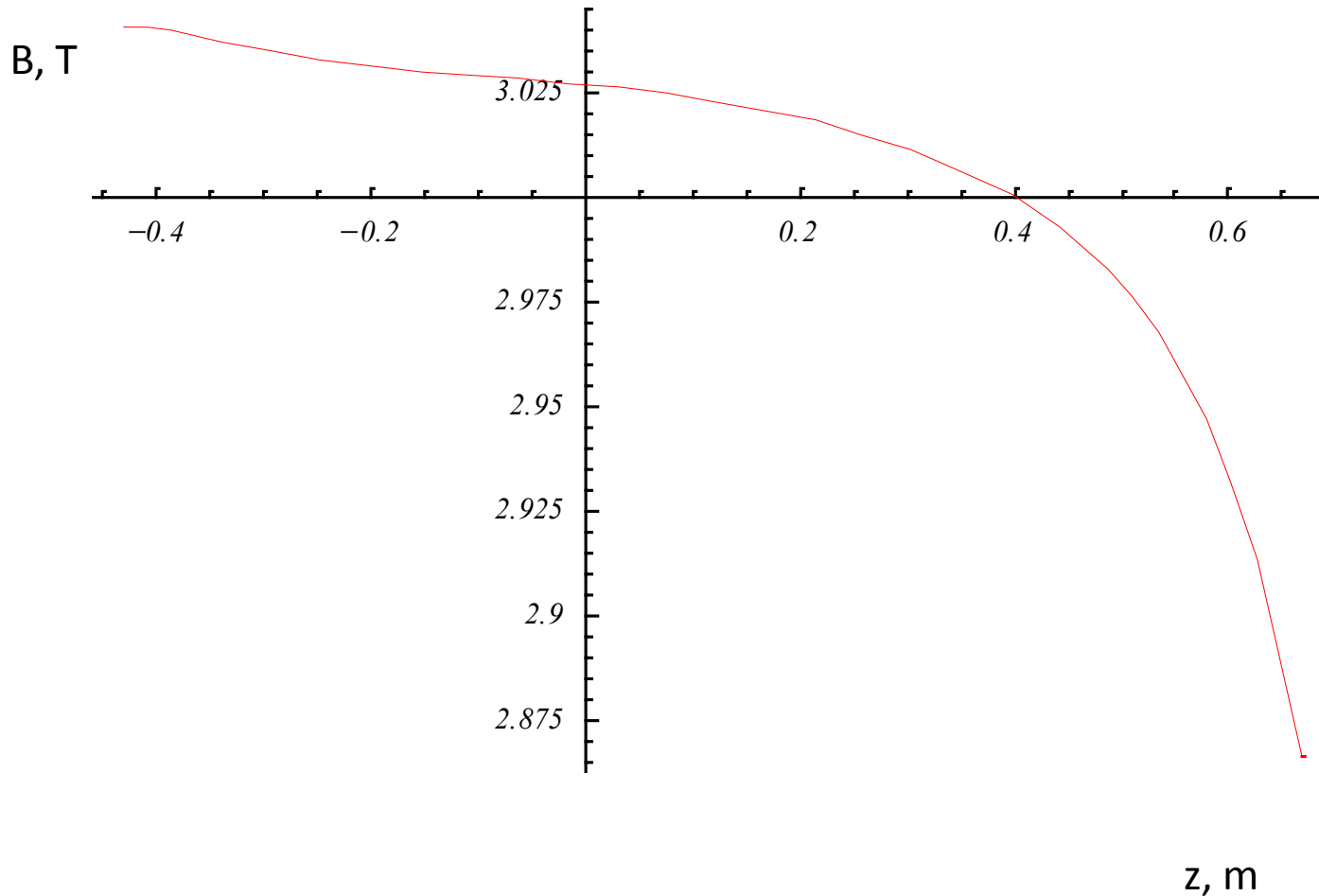


Setting	E2u	Cu	E1u	M2u	M1u	Fcu	Fcd	M1d	M2d	E1d	Cd	E2d
Sol_200_noMs	192.45	211.26	187.11	0.0	0.0	55.98	55.98	0	0	132.95	150.11	136.74

Ao Liu's lattice, optics



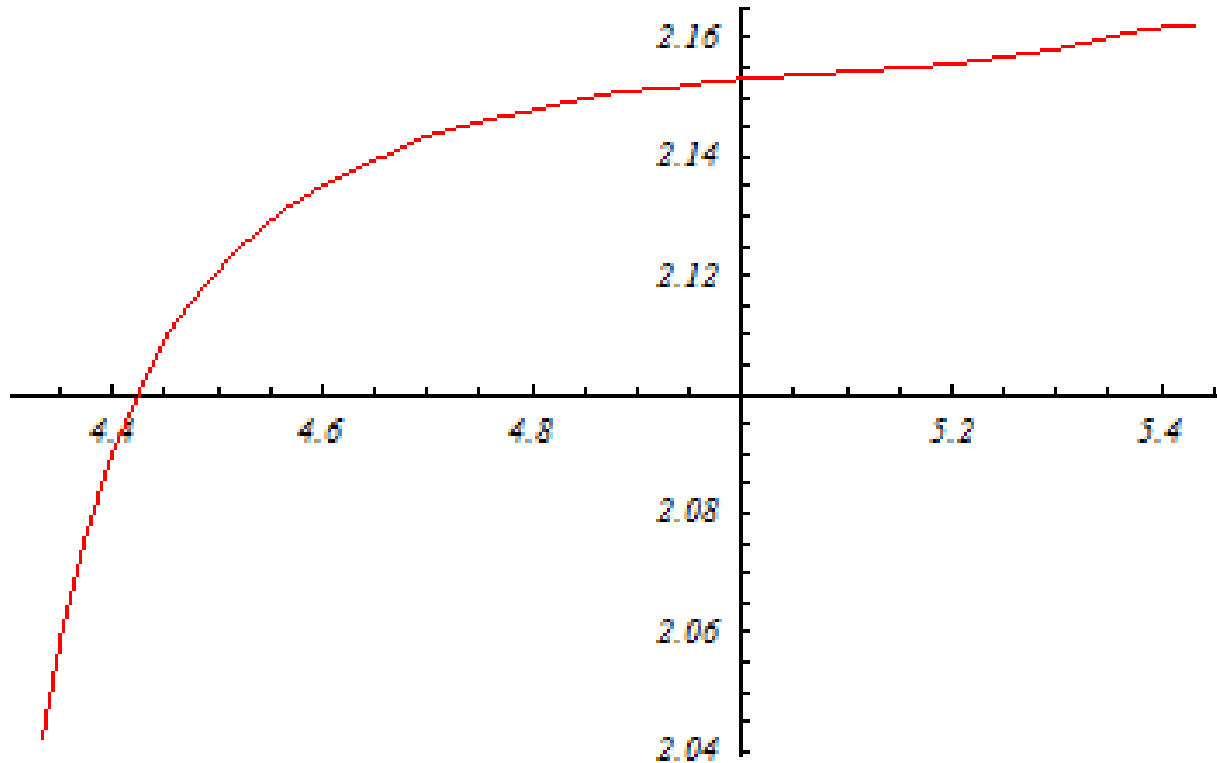
Zoom in Upstream Tracker



Error: $\pm 2.5\%$

Zoom in Downstream Tracker

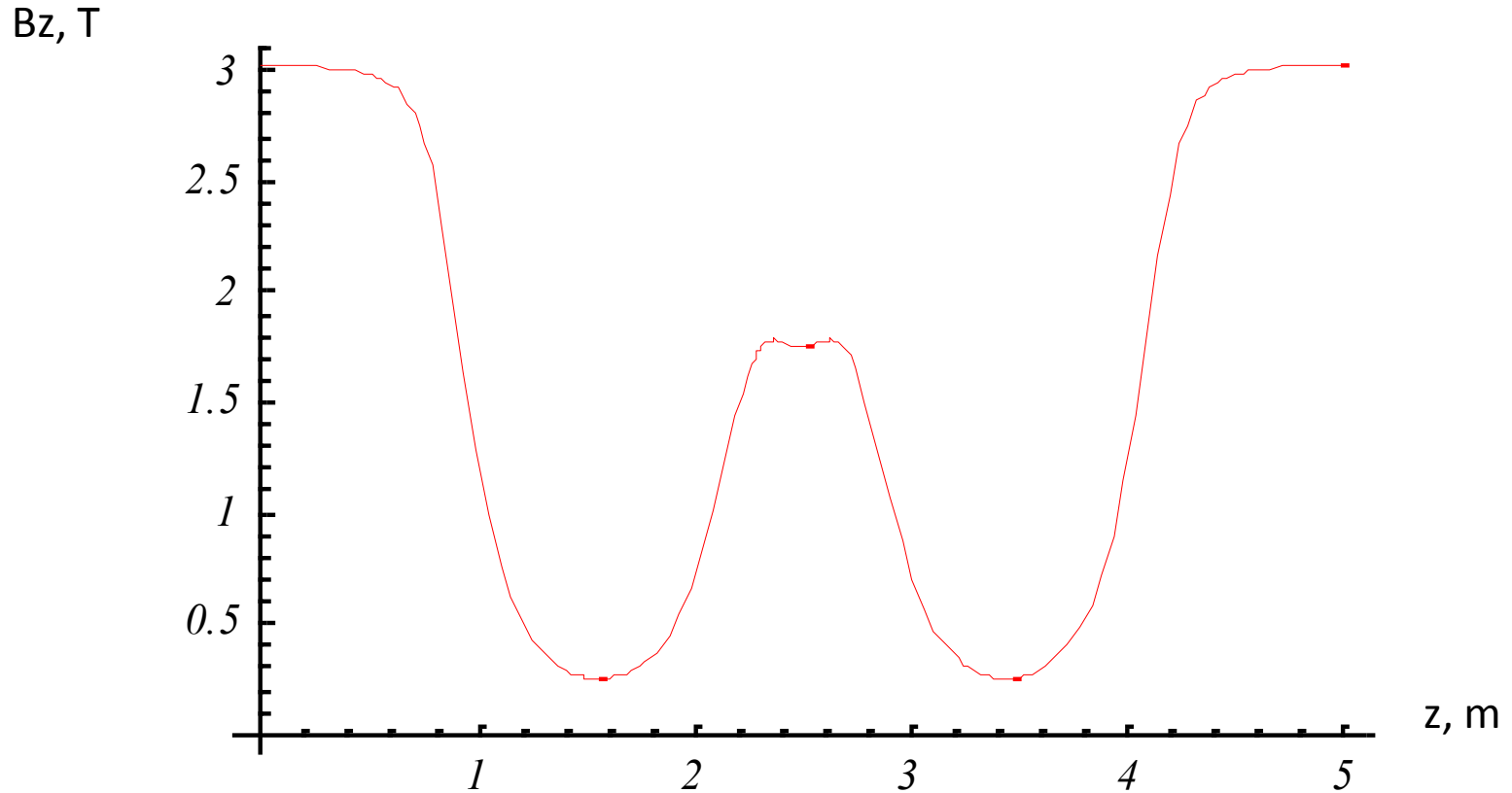
B, T



z, m

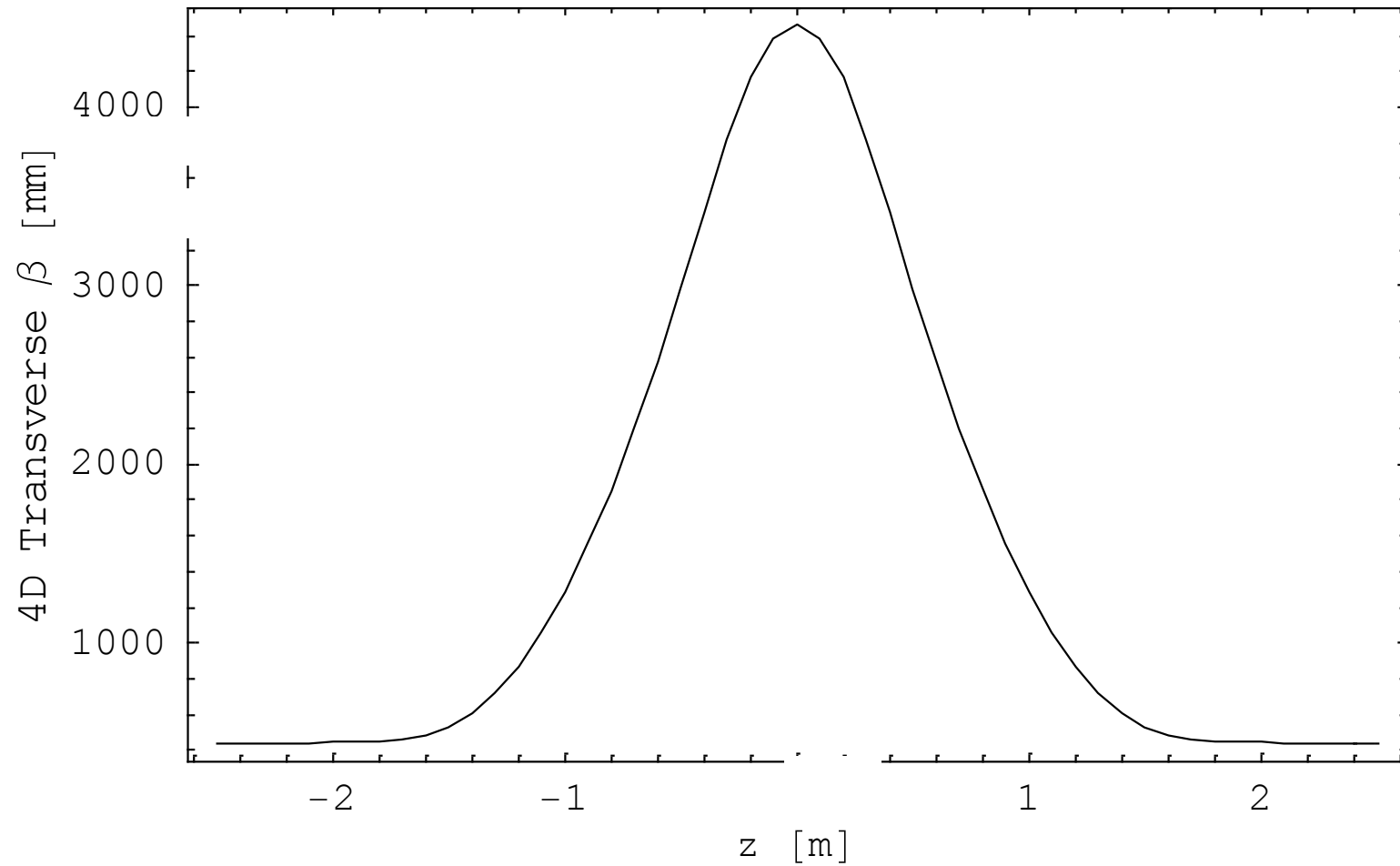
Error: $\pm 2.8\%$

Symmetric lattice with 3T in both SSU and SSD



Setting	E2u	Cu	E1u	M2u	M1u	Fcu	Fcd	M1d	M2d	E1d	Cd	E2d
Sol_200_noMs	192.45	211.26	187.11	0.0	0.0	63.12	63.12	0	0	187.11	211.26	192.45

Optics in symmetric lattice



To do list

- Need to decide, which lattice to choose (now).
- Implement final Hall survey dimensions -> done – no measurable effect.
- Implement cold dimensions ->work in progress!
- Perform tracker field uniformisation ->done in the past, need to check final result with SS team.
- Apply Witte corrections for solenoid lattice
->trivial

Deadline: tomorrow 14:00.