

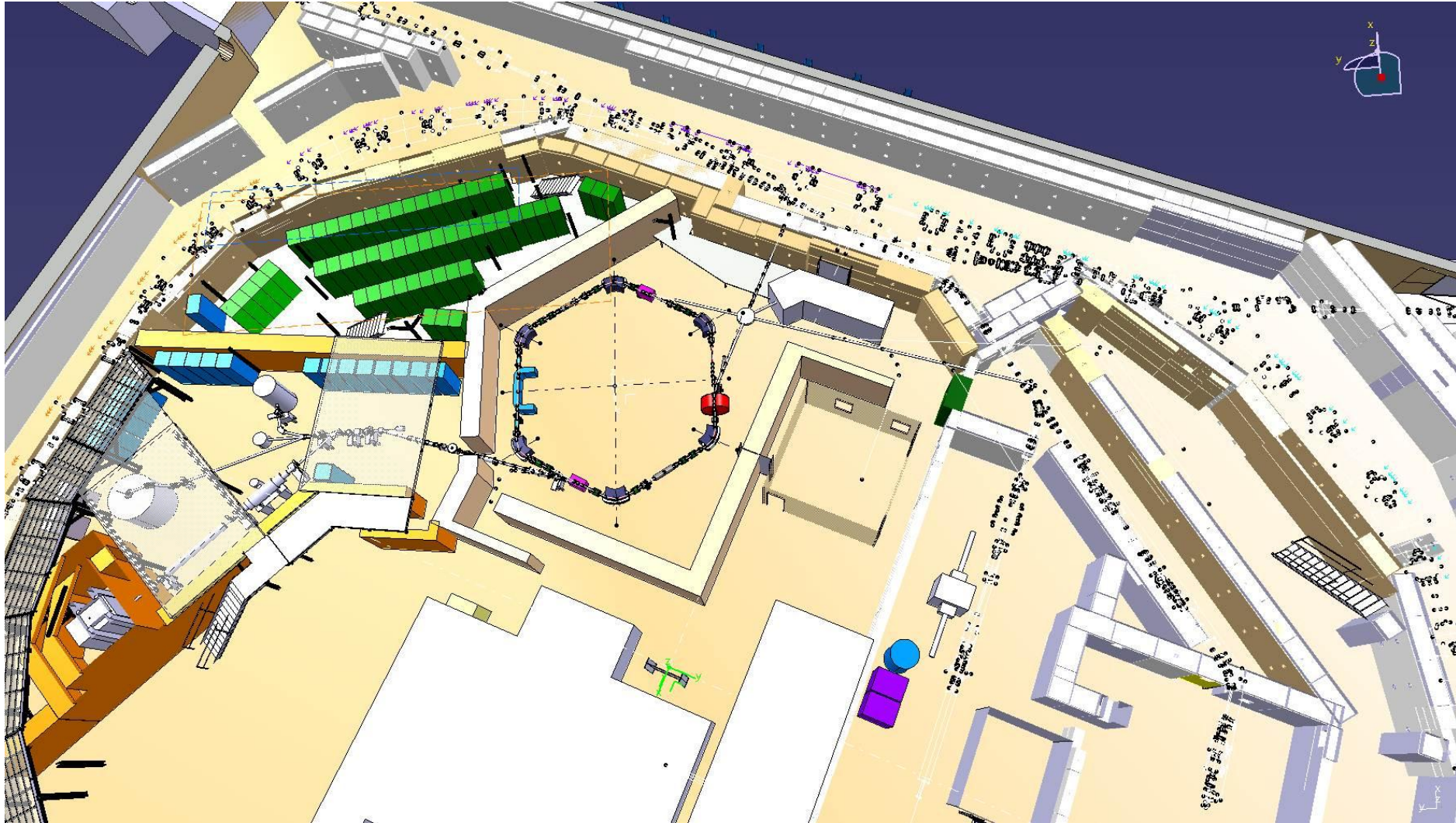
ELENA source: integration and beam transfer

W. Bartmann, D. Barna, F. Butin,
O. Choisnet, R. Gebel, G. Vanbavinckhove

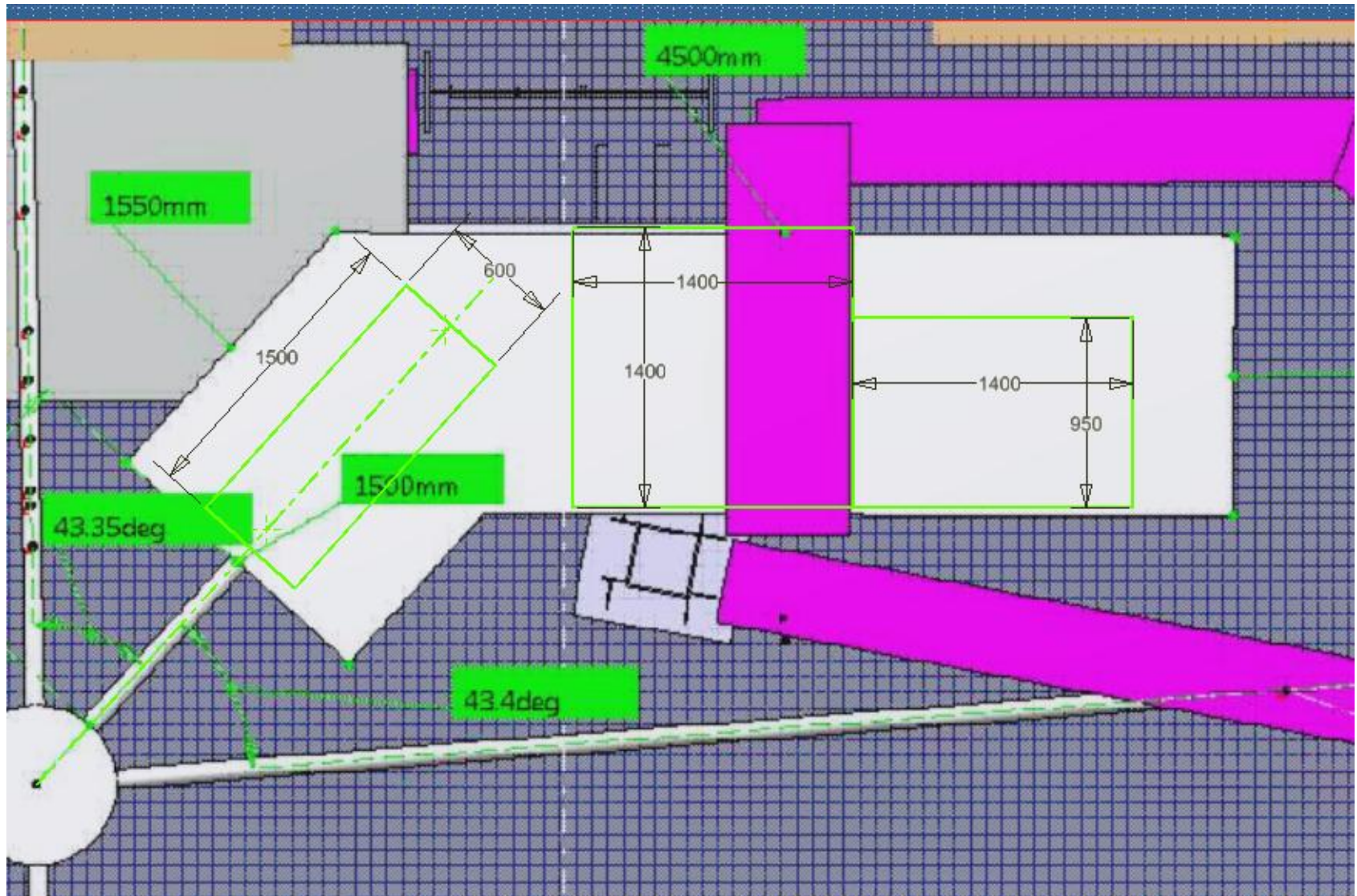
Transfer from the source

- Protons via extraction (normal ring polarity) and injection channel (reversed ring polarity)
- H- via injection channel (normal ring polarity)
- Define beam edge with the injection/extraction kicker

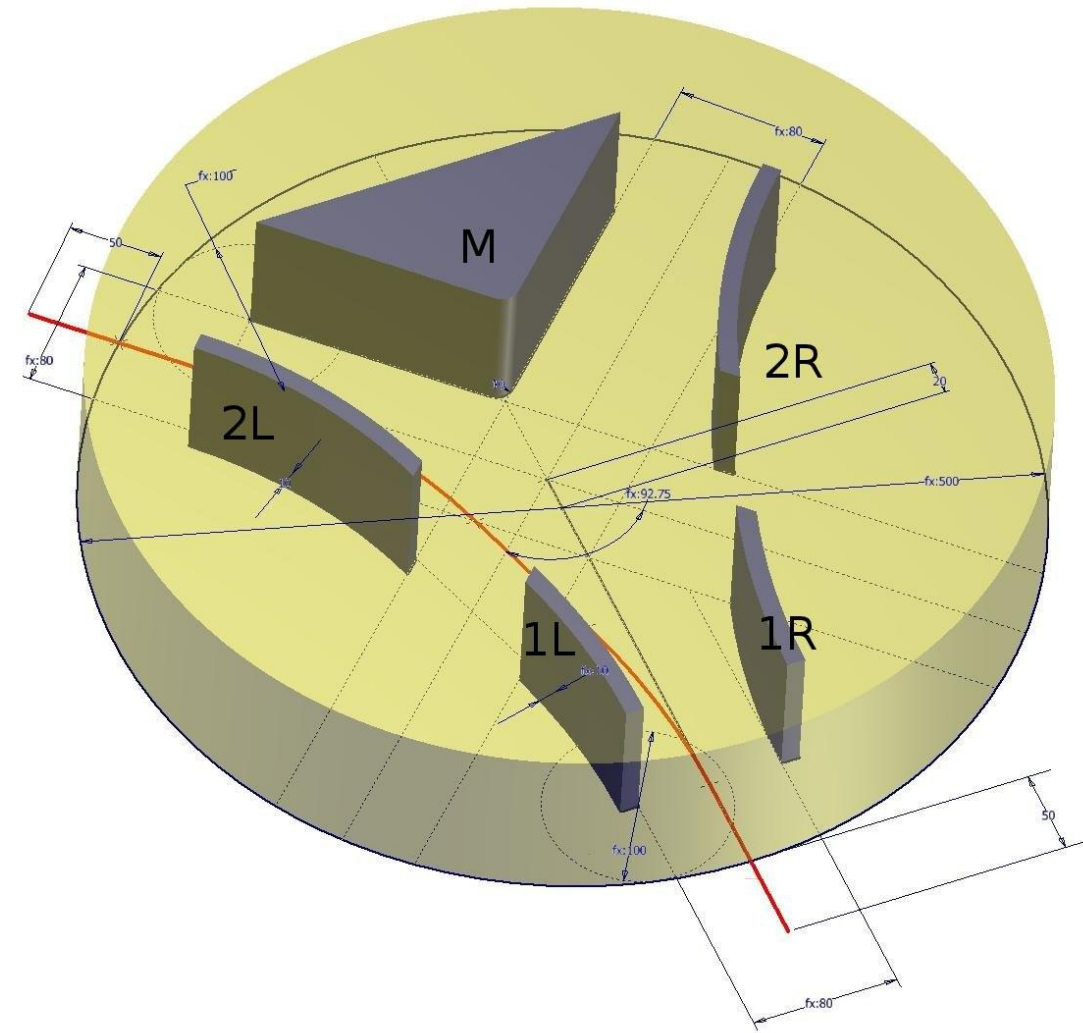
Source location



Source footprint



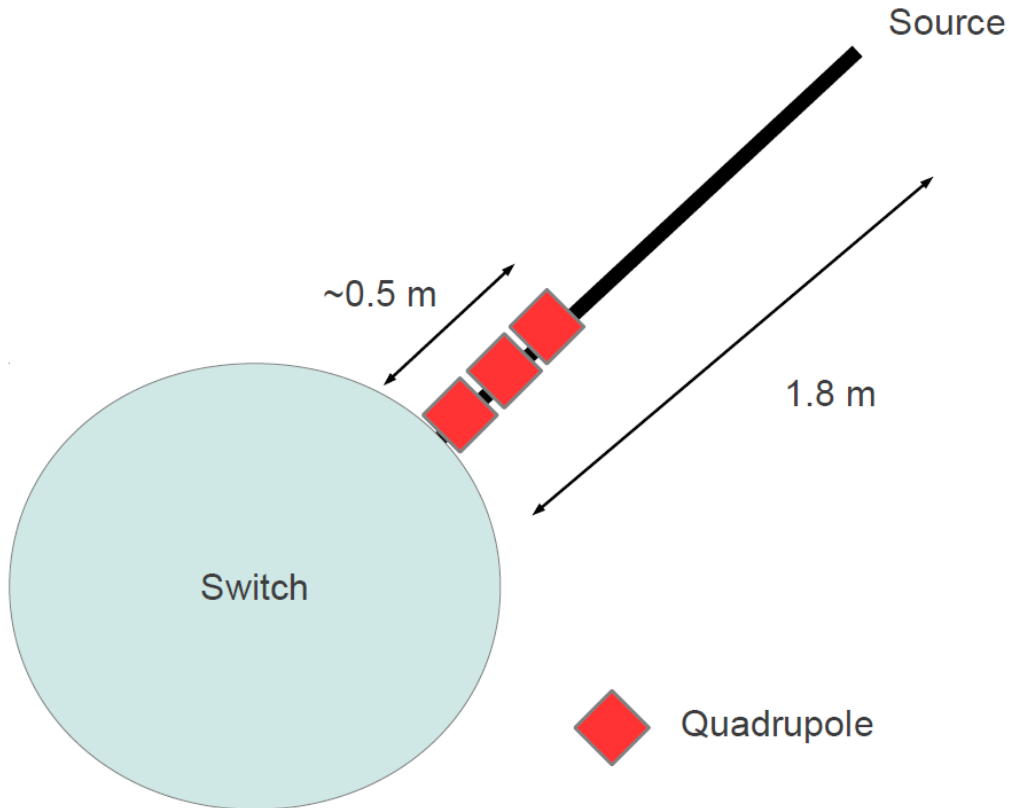
Crossing device



Seems feasible but
difficult to simulate
performance

Protons only via
injection channel →
much simpler crossing
device

Source line



Can we fit in 1.8 m:

- Vacuum
- Instrumentation
- Quadrupoles

Summary

- Location and coarse integration dimensions frozen
- To be addressed:
 - Integration details
 - Vacuum
 - Crossing device
 - Beam parameters for optics design