

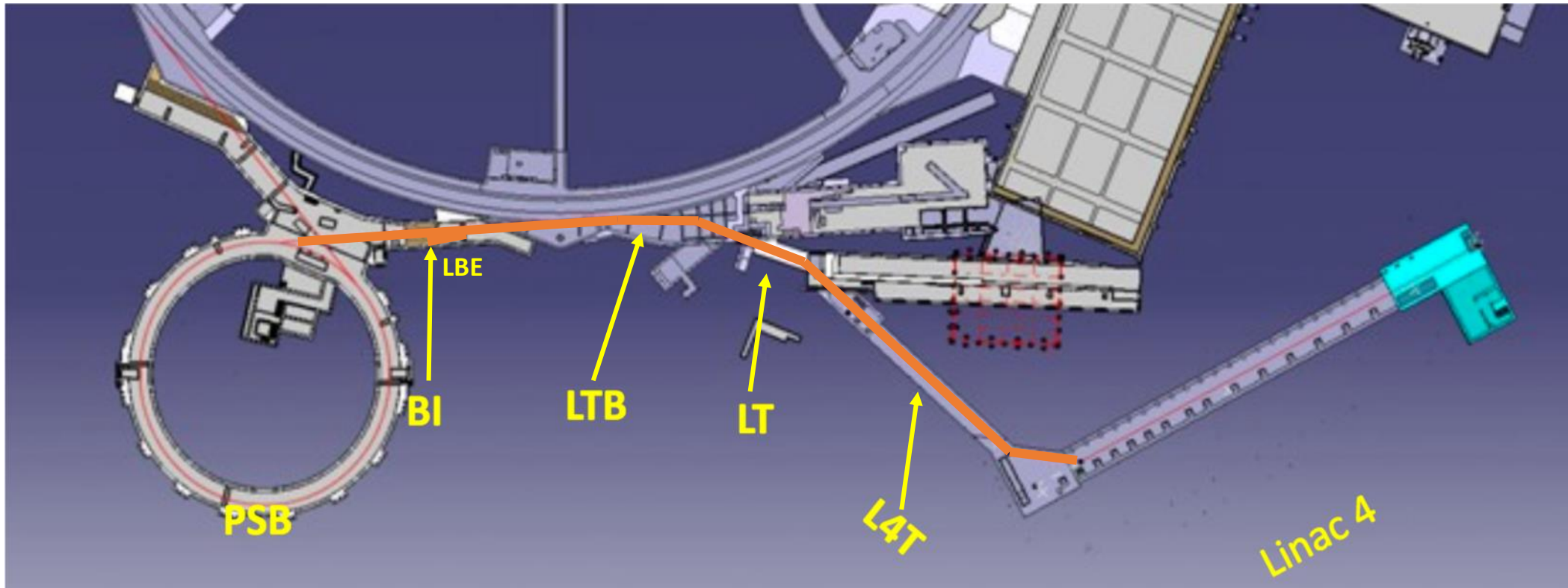


NG vs X LINAC 4

Piotr Skowronski

Object under study

- Transfer lines from Linac4 to PSB (L4T + LT + LTB + BI)



- Transfer lines from Linac4 to PSB (L4T + LT + LTB + BI)
 - Linac4 MADX model exists, but it is a complete fake
 - No accelerating cavities in MADX, no space charge in MADX nor PTC
 - One should compare with TraceWin or TRAVEL/PATH models
- H⁻ @ 160.7 MeV (proton with two electrons)
- Bends (H & V) and quads, plus one cavity in the middle to regulate energy spread
 - Cavity does not accelerate
 - PTC required, because MADX does not have RF focusing
- Not a straight forward model
 - Dynamically stitched lines, each line defined separately in 2 files
 - Model controlled via configuration variables

- There are big disagreements, Laurent is investigating

