Intro

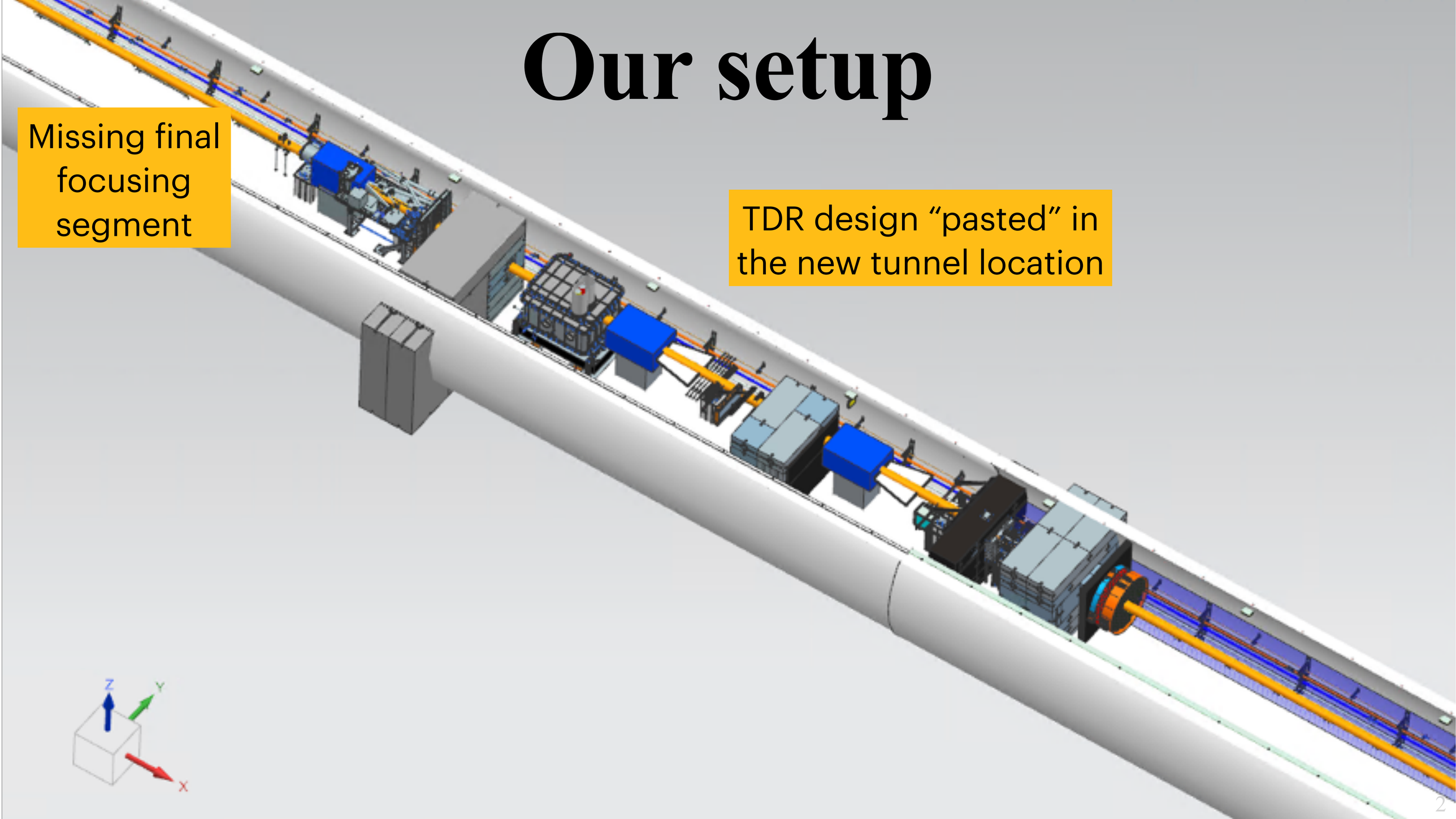
- Workshop on Sep 8-10: https://indico.desy.de/event/48845/
  - SAS session (~2h):
    - FastSim-based optimization of the experimental setup
    - Very preliminary GEANT4 feedback (Sasha)
  - More like a discussion than a list of results.

- New results:
  - Detailed NPOD study paper: https://arxiv.org/abs/2507.17716
  - Tracker for E320 (sim. only): https://arxiv.org/abs/2506.04992

Our setup

Missing final focusing segment

TDR design “pasted” in the new tunnel location



What we need to do in the next month

- Sasha has the CAD already but waiting for the final focusing section (cut ~10-15 m)
- FastSim (1): focus on the physics acceptance (no backgrounds, radiation, etc.)
  - naively assume that everything stays the same
  - play around with the spacing
  - conceptually try out also different (smaller, weaker) magnets
- FastSim (2): fine tuning of the setup
  - change to more realistic shielding, add shielded readout crates, etc.
  - check if there are changes needed to the sub-systems
- FullSim: run full scale GEANT+FLUKA simulation for initial radiation estimates
  - send to XFEL/DESY officials, get feedback and continue fine tuning