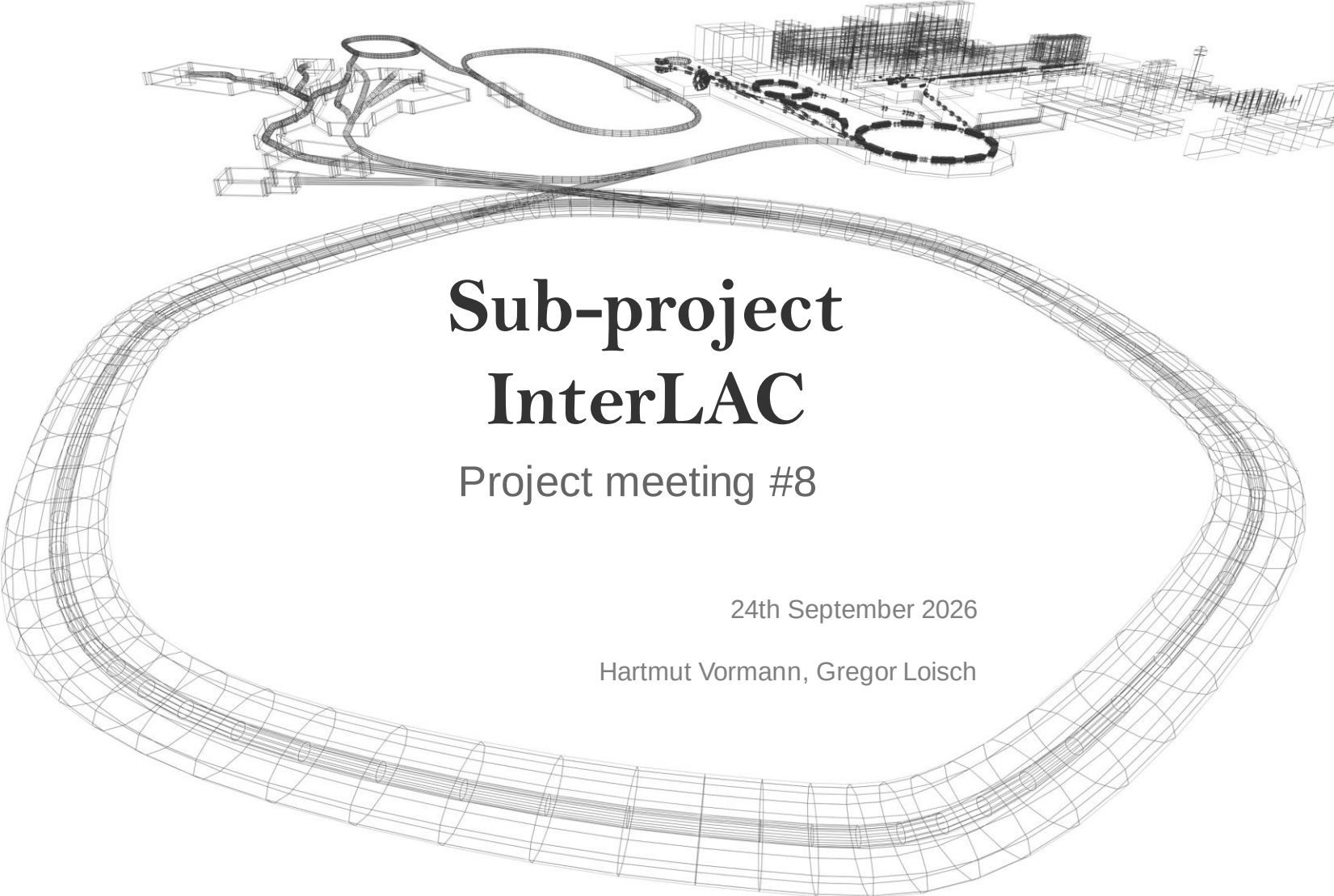


A detailed wireframe model of a particle accelerator, showing a large circular ring and several smaller, more complex sections. The model is rendered in a light gray wireframe style, highlighting the structural complexity of the facility.

Sub-project InterLAC

Project meeting #8

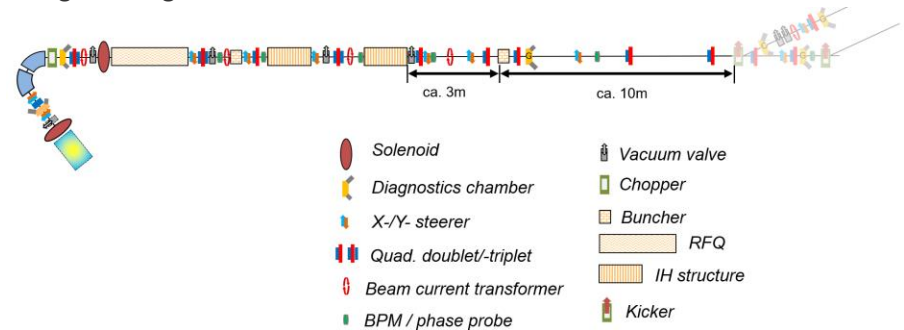
24th September 2026

Hartmut Vormann, Gregor Loisch

Status – general infos

■ beamline layout

- frozen
- decision next week: ~no booster → possible shortening of long transport

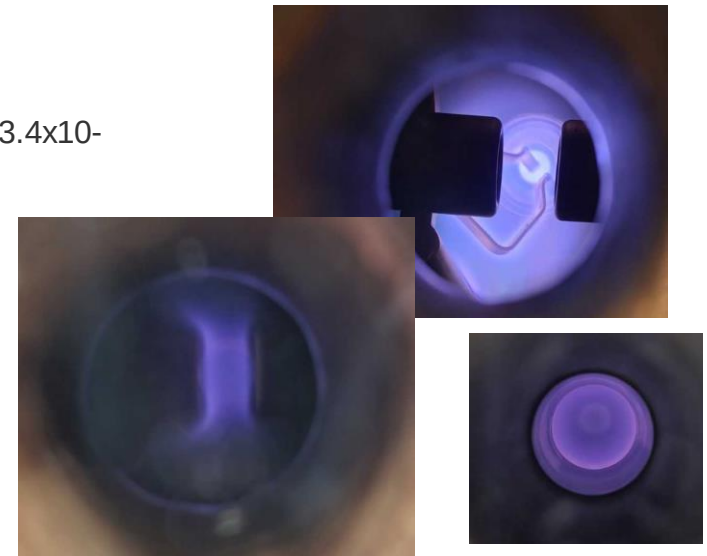


■ RFQ preparation

- vacuum work ongoing
- outside O-ring seals exchanged → vacuum test

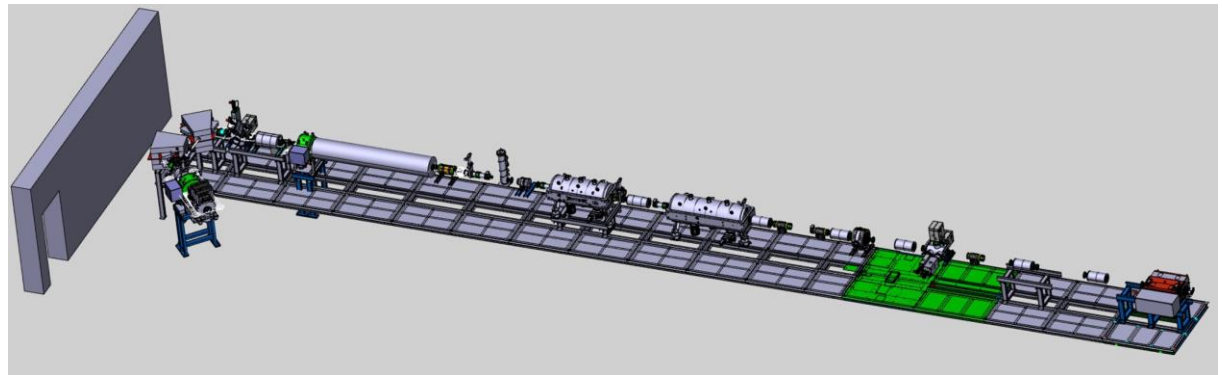
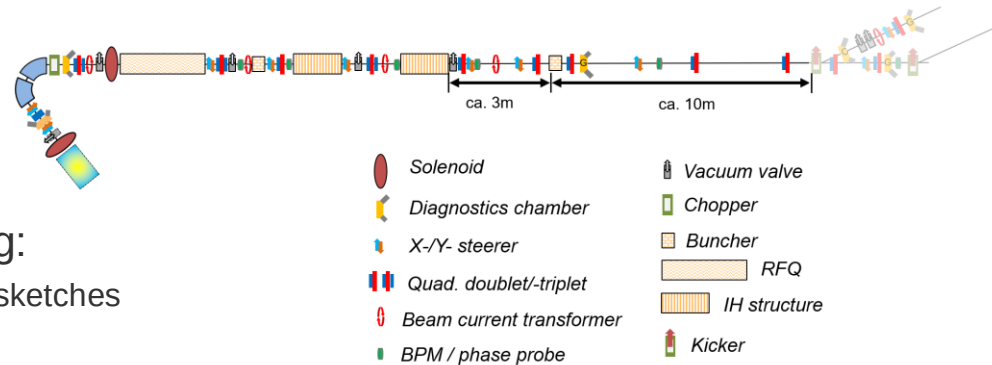
■ Plasma cleaning test successful

- plasma produced in Z-buncher cavity
- excitation/plasma ignition in different modes
- possible improvement in vacuum measured (5.5×10^{-7} mbar → 3.4×10^{-7} mbar)
- cavity quality factor unchanged
- no detailed measurement (RGA, plasma diagnostics set up)
- amplifier to be ordered



Construction, installation & alignment

- 1st milestone: 1.11.28 ion source operational
- installation from front
(no problem ~long transport,
incl. steerers)
- Frames/support structure for mounting:
 - Purchase request sent, questions about 2D sketches communicated..
- Discussion at 1pm
→ let me know if you want to participate



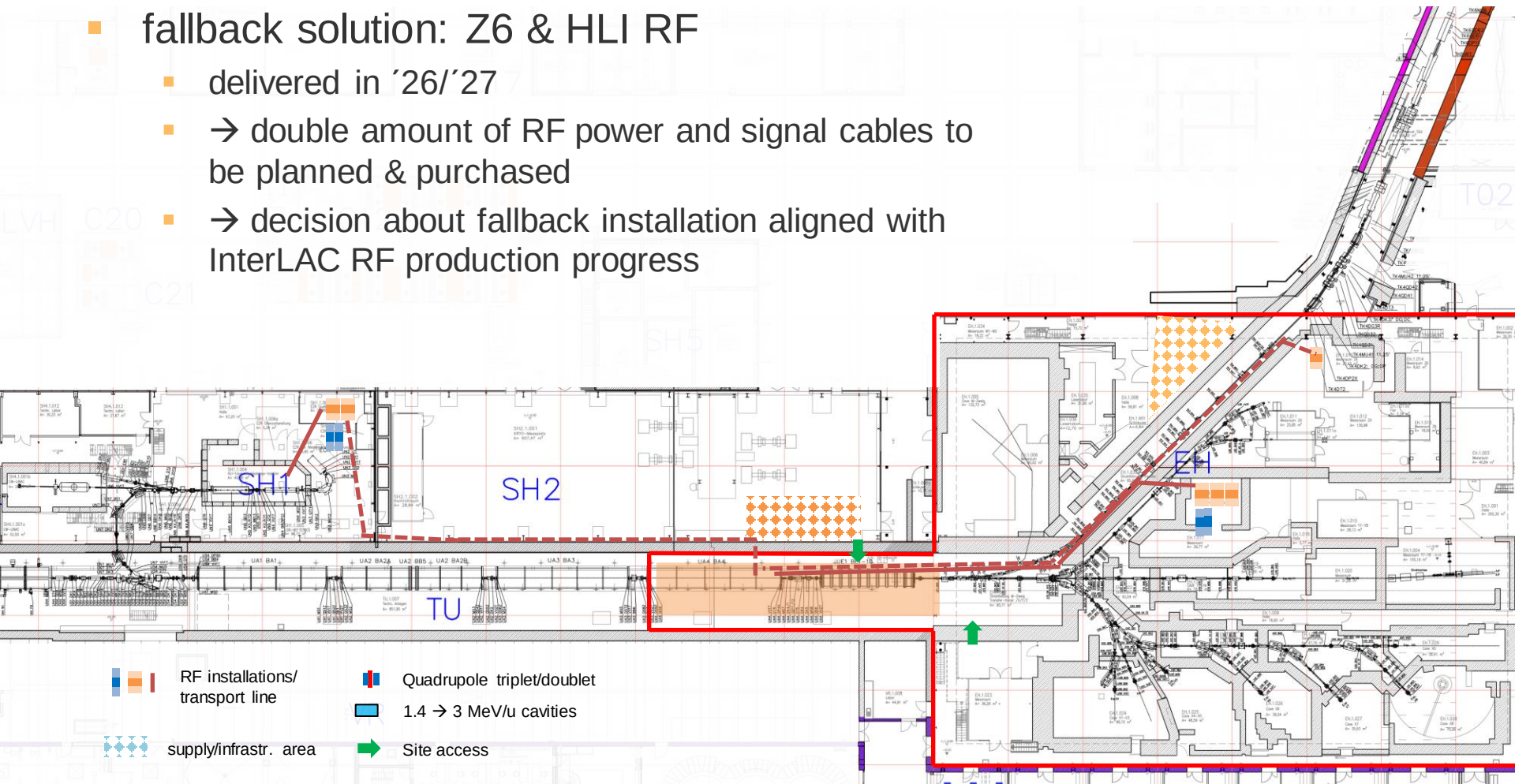
Rack positioning

- fields will be/are (?) allocated
- groups define exact positioning



RF system setup site

- InterLAC RF will be installed at Z7
- fallback solution: Z6 & HLI RF
 - delivered in '26/'27
 - → double amount of RF power and signal cables to be planned & purchased
 - → decision about fallback installation aligned with InterLAC RF production progress

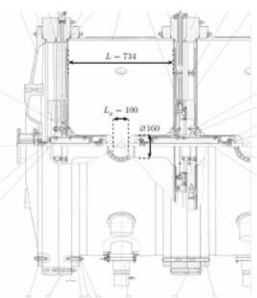


- Procedure now ~defined
 - 0. definition of rack positions and beamline component positions
 - 1. definition of cable lists by WPs/groups (start/end positions, cable type, ?)
 - 2. collection of lists by MV/GL/Hvo
 - 3. rough cable routing by GAT
 - 4. estimate of lengths
 - 5. ordering of cables with 50-100% buffer (UNILAC installation)
 - 6. detailed cable routing & installation planning by GAT/BAU

- TBD: cable purchasing by groups/centralised
 - Power cables by EPS, RF cables by LRF...
 - identify common cables & summarise orders
 - special cables by WPs/groups?

- Main reason: beam transport to SIS18
 - beam rigidity ~low
 - large geometric emittance
 - beam transport simulations show >97% transmission
 - beam rigidity >> p+
 - further advantages
 - higher stripping efficiency
 - ~higher SIS18 injection efficiency
- omit energy booster for, e.g., 18 GHz ECR components!?

Single gap resonators



	10 ER's (RF+quads)	2 ER's (RF+quads)	2 ER's (quads)	remove ER's
InterLAC procurement	Add. RF system to be purchased	Add. RF system to be purchased	No major changes	No changes
InterLAC installation	Less installations	ER closing in short time	ER closing in short time	Removal not time-critical
InterLAC operation	(Additional RF system), less flexible in beam transport, less diagnostics	(Additional RF system)	No major changes	No changes
UNILAC installation	Less installation required	Less installation required	Less installation required	Only re-positioning required
HELIAC installation	De-installation of 8 ER's in short time (~18 months)	Less installation required	Less installation required	Less installation required