Motivation and proposed layout modifications of SS216

M.A. Fraser
Present layout

- Motivation for change: to sectorise vacuum layout between ZS and TECS

- VV offset by 16 mm into the page
Final layout

- Option 3, keep existing valve, swap with crystal

- Swap valve and crystal
- BPCE moved upstream of MDHA for impedance reasons
- VV stays offset by 16 mm into the page
Checklist

• Aperture checked:
  • OK but do not want to move VV any further downstream
  • Larger VV is prohibitively expensive
• Longitudinal impedance checked:
  • Final layout solution was the best compromise vs. cost
  • Questions on requirement for impedance screen / measurements ?
  • Presentation from Christine and Aaron today
• TECS integration checked:
  • TECS to be offset 16 mm towards outside of the SPS
  • Question on the larger stroke of actuator and adjustment of end stops etc. ?
  • Presentation from Luigi today
• New supporting structures for crystal and displaced valve:
  • Benoit Riffaud (EN-MME) ready to start work
  • Quote received for design work and manufacturing of supports
Next steps

• Converge on acceptable solution for TECS support:
  • Launch design work ASAP
  • Offline discussions to be organised by Bruno (TE-ABT) with Benoit (EN-MME) and Luigi / Regis (EN-STI)

• Changes to SS216 to be included in Christine’s ECR for approval by IEFC:
  • TE-ABT, EN-MME and EN-STI to provide input
  • Vacuum layout finalised and chamber production launched

• Planning and schedule:
  • Timeline for design, manufacturing and installation ?