

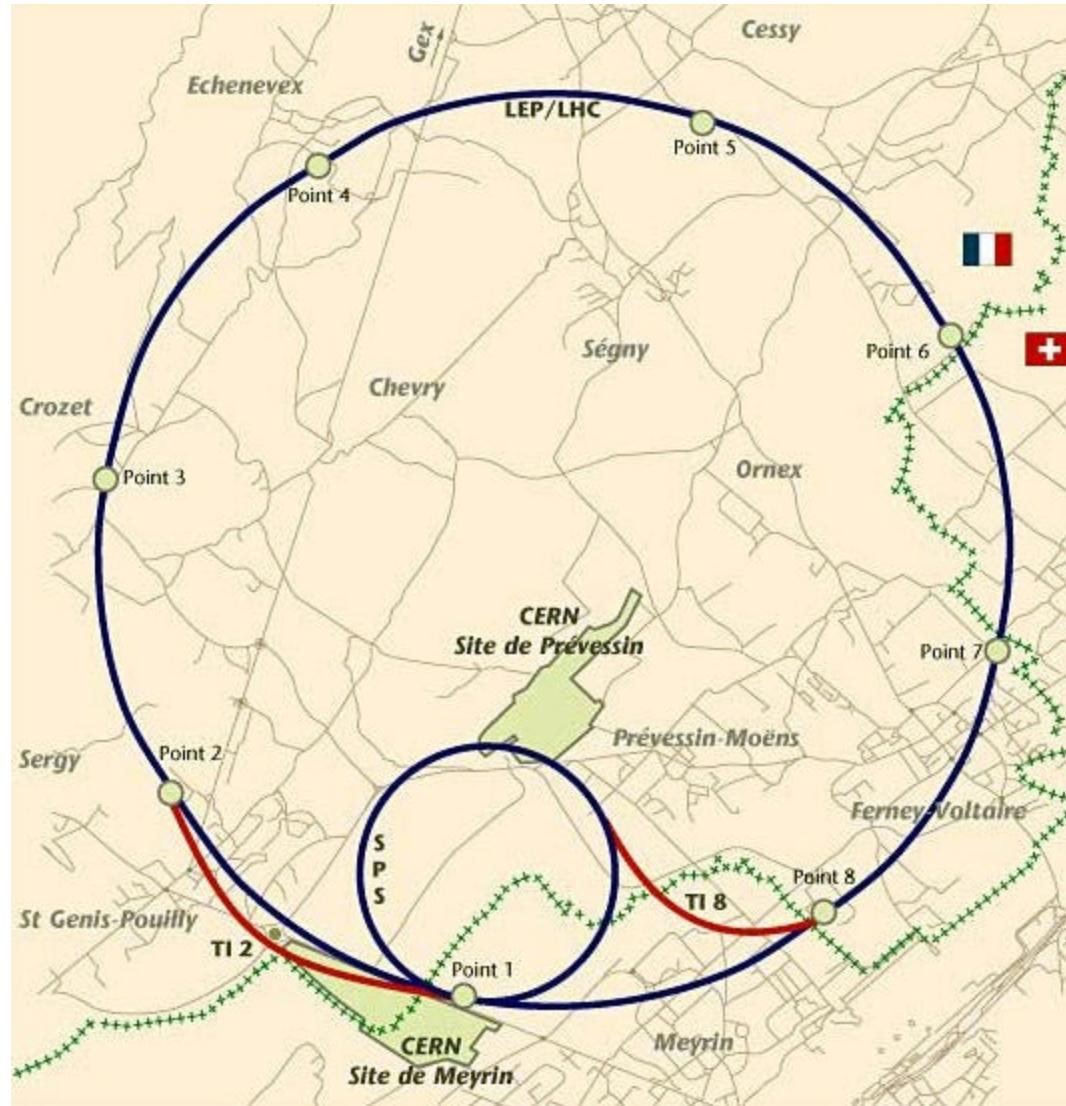


# Comments on Transfer Line Work

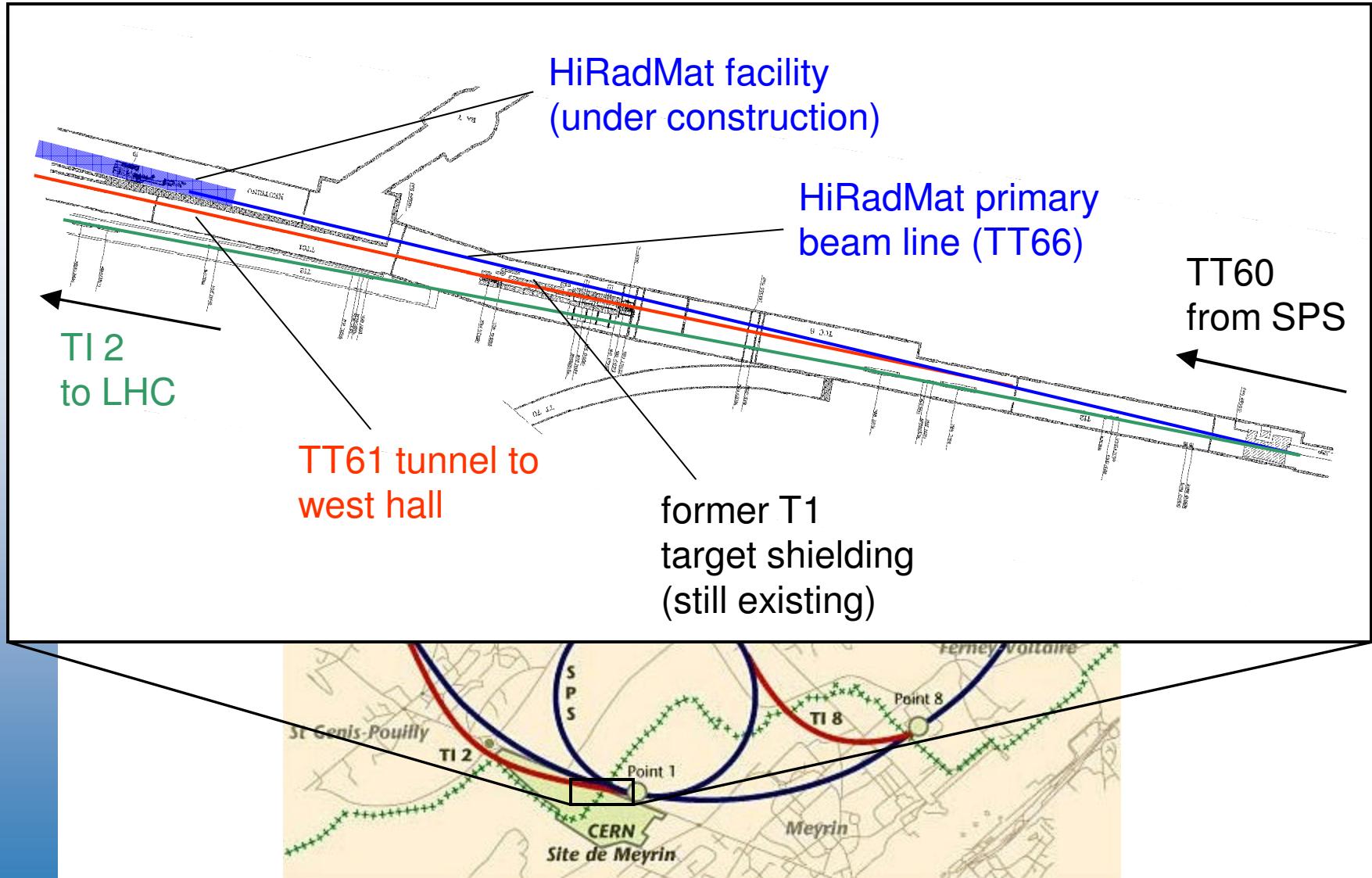
Christoph Hessler, TE/ABT, CERN

PPA09 Workshop, 17-18 December 2009, CERN

# Location of the PWA Beam Line



# Location of the PWA Beam Line



# Initial Situation

- TT66 beam line design finalized and construction work launched
- Large slope of 8.5% of the TT61 tunnel
- Some equipment of previous H3 beam line in TT61 tunnel still present
- Passage for new beam line blocked by highly radioactive T1 target shielding  
→ T1 dismantling under study

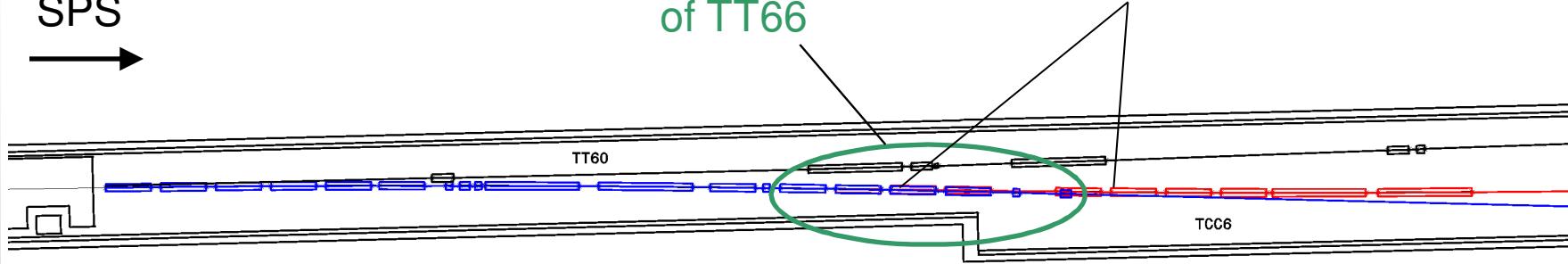
# Compatibility with TT66 Beam Line

Beam  
from  
SPS

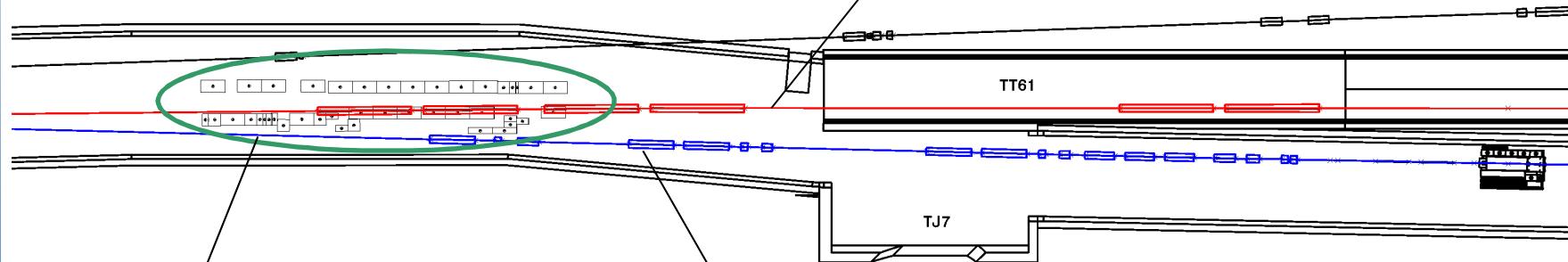


Modification  
of TT66

8 new switching  
magnets



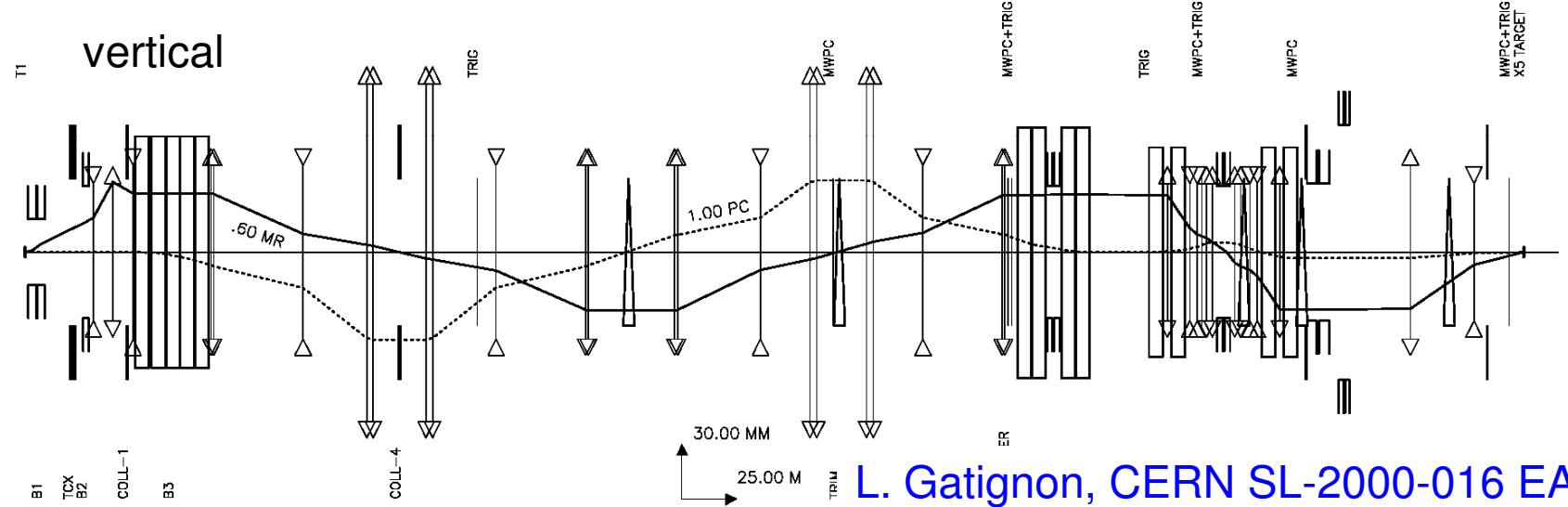
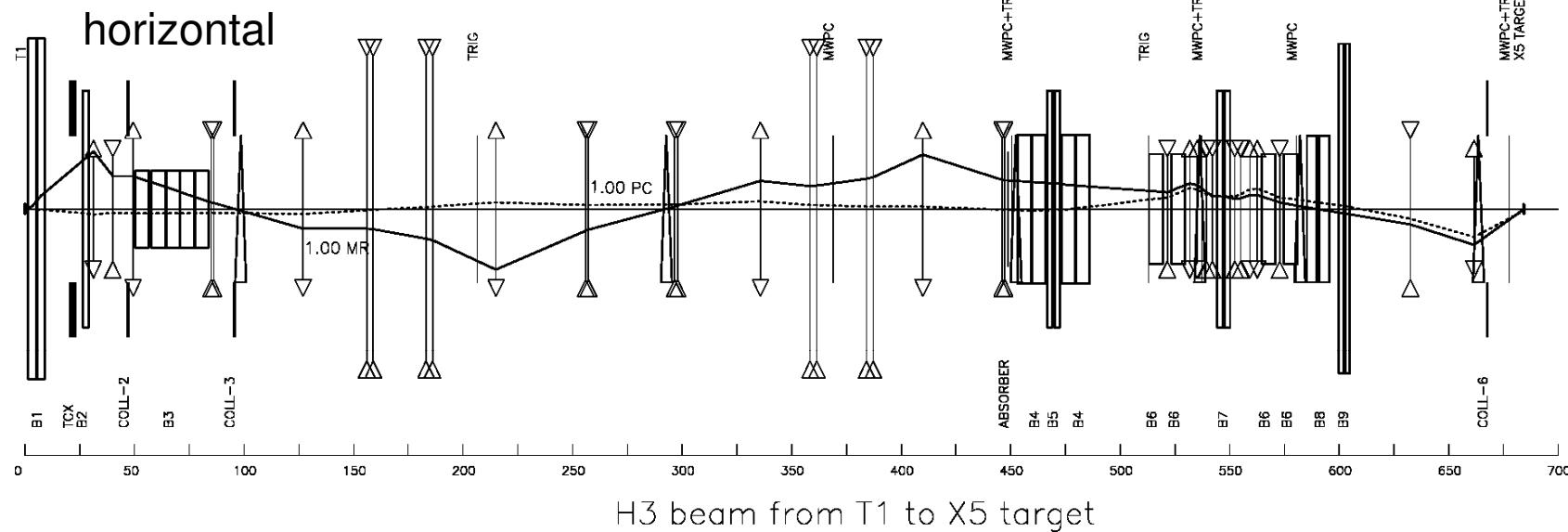
New PWA  
beam line



T1 target  
shielding

HiRadMat primary  
beam line (TT66)

# Optics Design of Former H3 Beam Line in TT61



# TCC6 Cavern (2008)



# TCC6 Cavern (2008)



# TCC6 Cavern (2008)



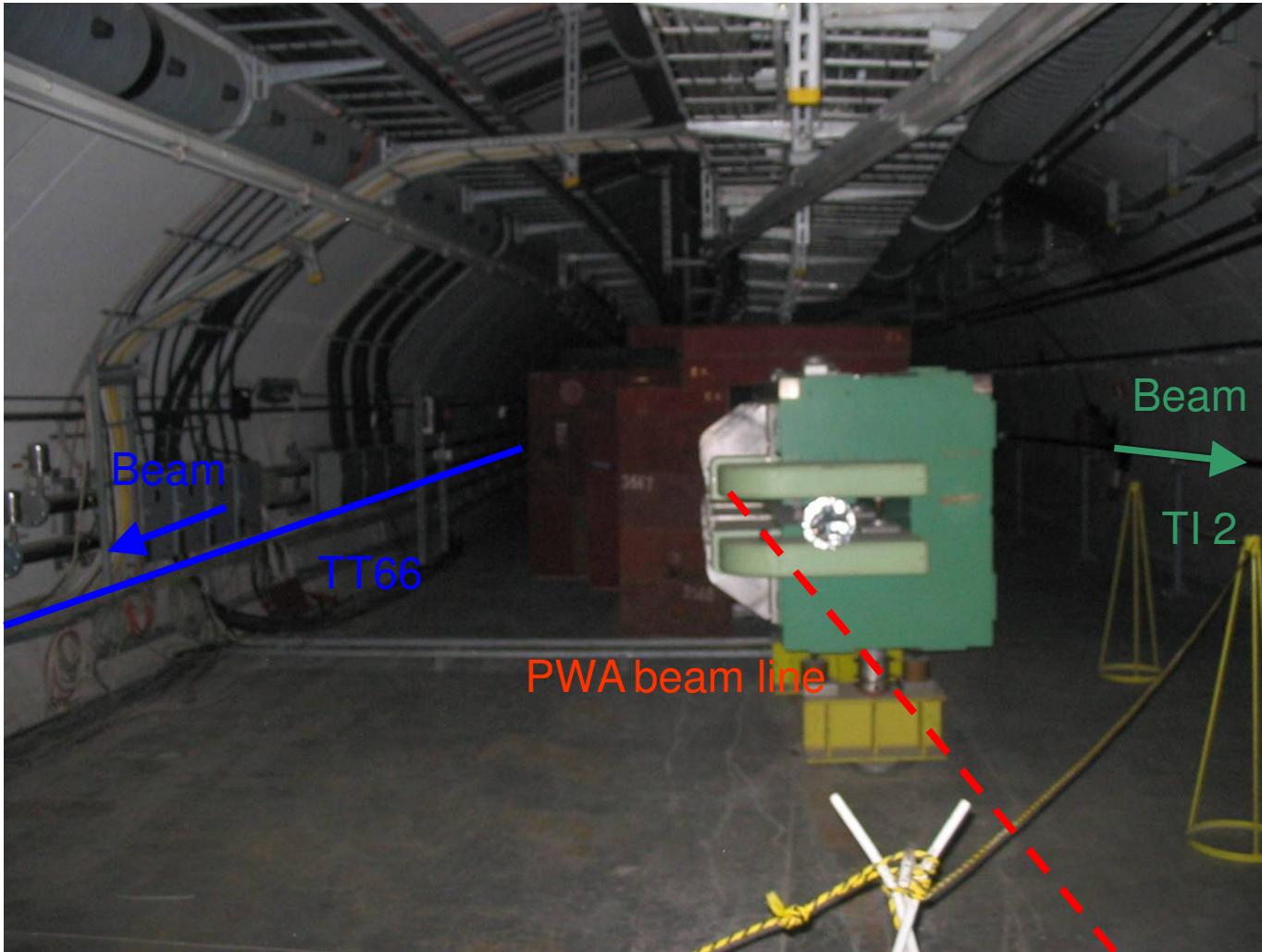
# TCC6 Cavern (2008)



# TCC6 Cavern (2008)



# TCC6 Cavern (2008)



# TT61 Tunnel (2007)



# TT61 Tunnel (2007)



# TT61 Tunnel (2007)



# TT61 Tunnel (2007)



# TT61 Tunnel (2007)



# Conclusion and Outlook

- Very preliminary feasibility study shows that PWA beam line seems to be compatible with TT66 beam line from the geometrical point of view.
- T1 target shielding needs to be removed.
- Former H3 beam line designed for 250 GeV/c  
→ TT61 tunnel geometry suitable for 450 GeV beams?
- Beam parameters and requirements needed to start optics design.