

# Status Report

# 100 keV DC Gun Test Stand

May 2, 2005

# Gun Test Stand Schedule

- Presently
  - Bunker and LAC are ready
  - Electrical installations and cabling completed
  - Solenoid field measurement completed
- Ongoing
  - Zoom optics resolution testing
  - The Holy Grail: UHV cleaned components should arrive this week (?)
  - Cabling of diagnostic module and connection to control system
  - EPICS drivers/software & optical link to hot deck
- Outlook
  - HV testing
  - Pumpdown and bakeout
  - Electron bombardment with a single-tip modified FEA
  - Commissioning & first measurements

# Test Stand Bunker Right Now...



# Hot Deck & Pulser

Ion Pump  
500 l/h

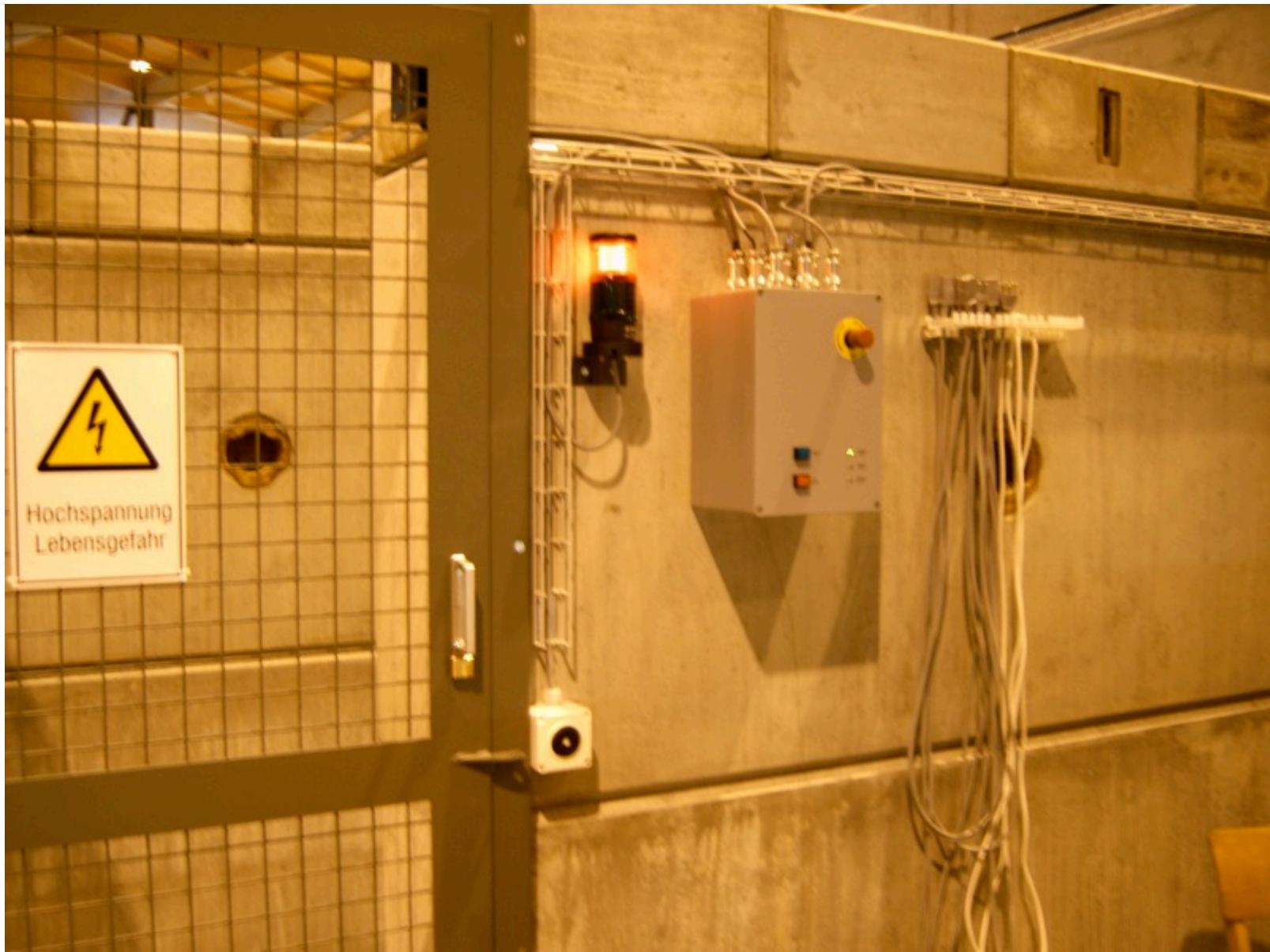
Experiment  
Support



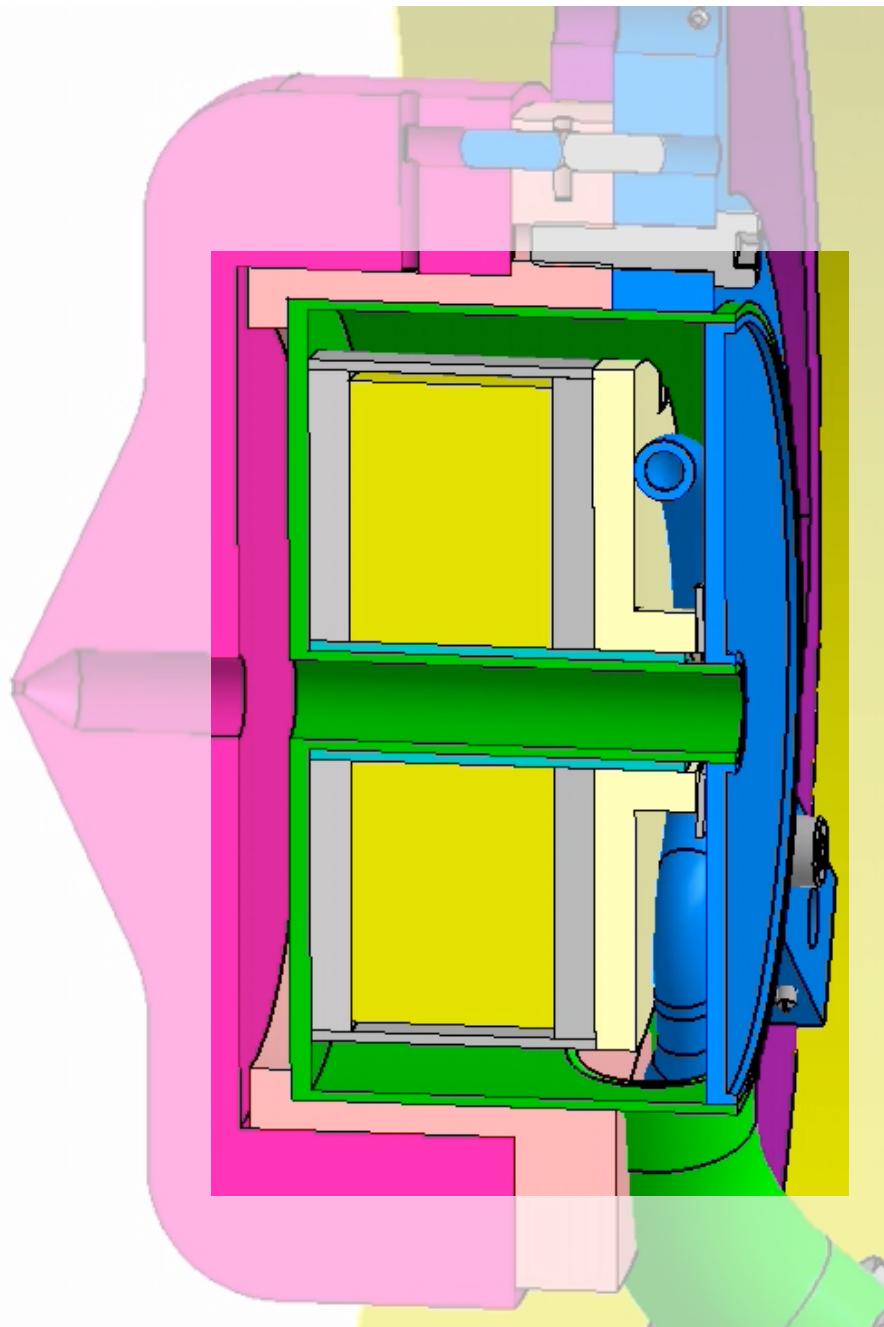
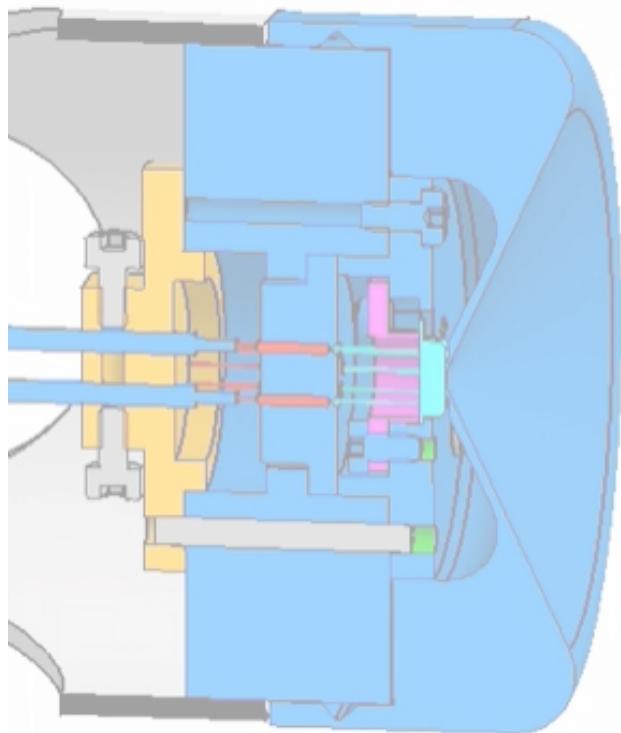
19" Rack  
100 kV

Isolating Transf.  
230 V

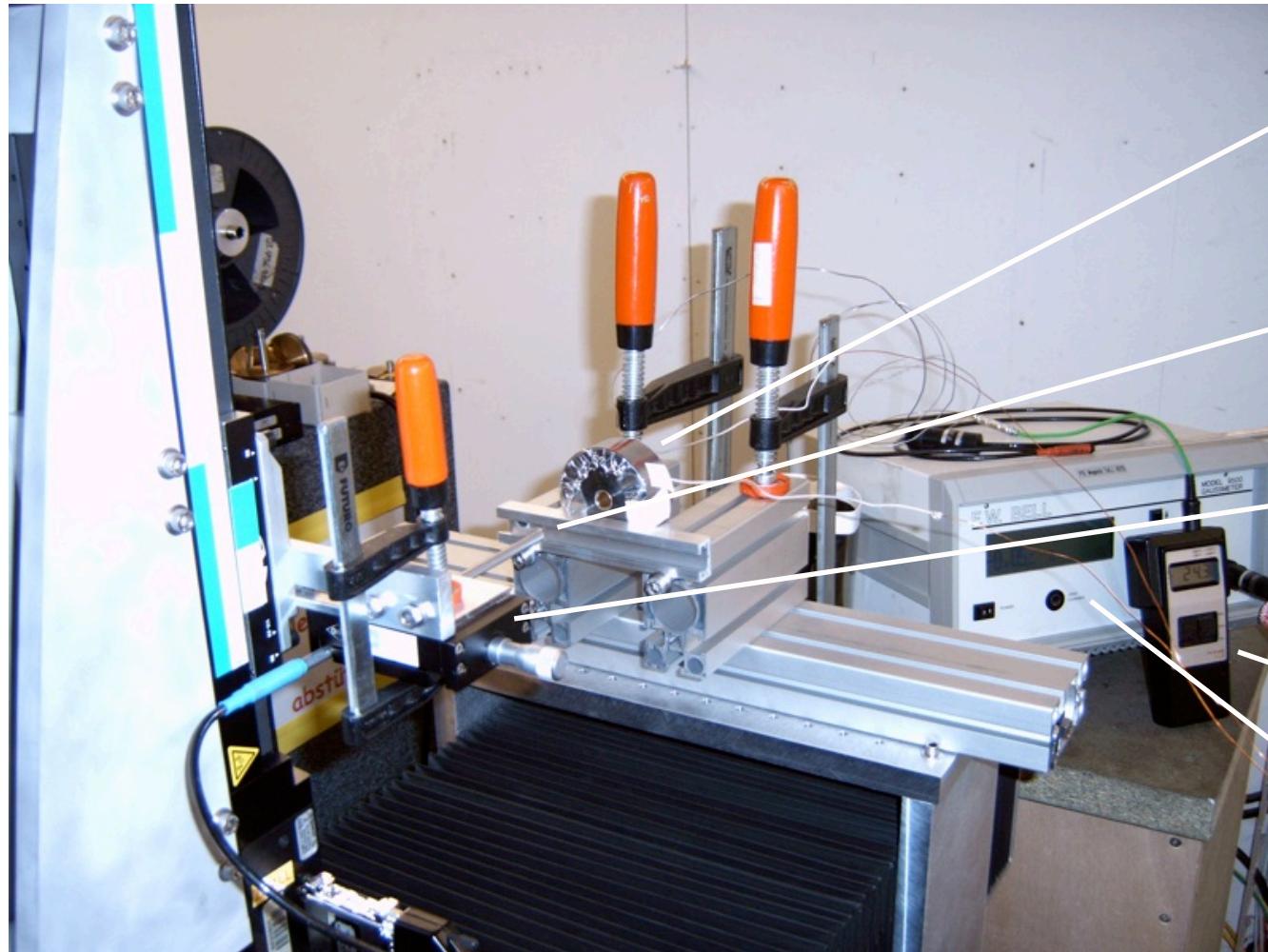
# LAC Installed



# In-Vacuum Solenoid Magnet



# Solenoid Field Measurement Setup



Solenoid

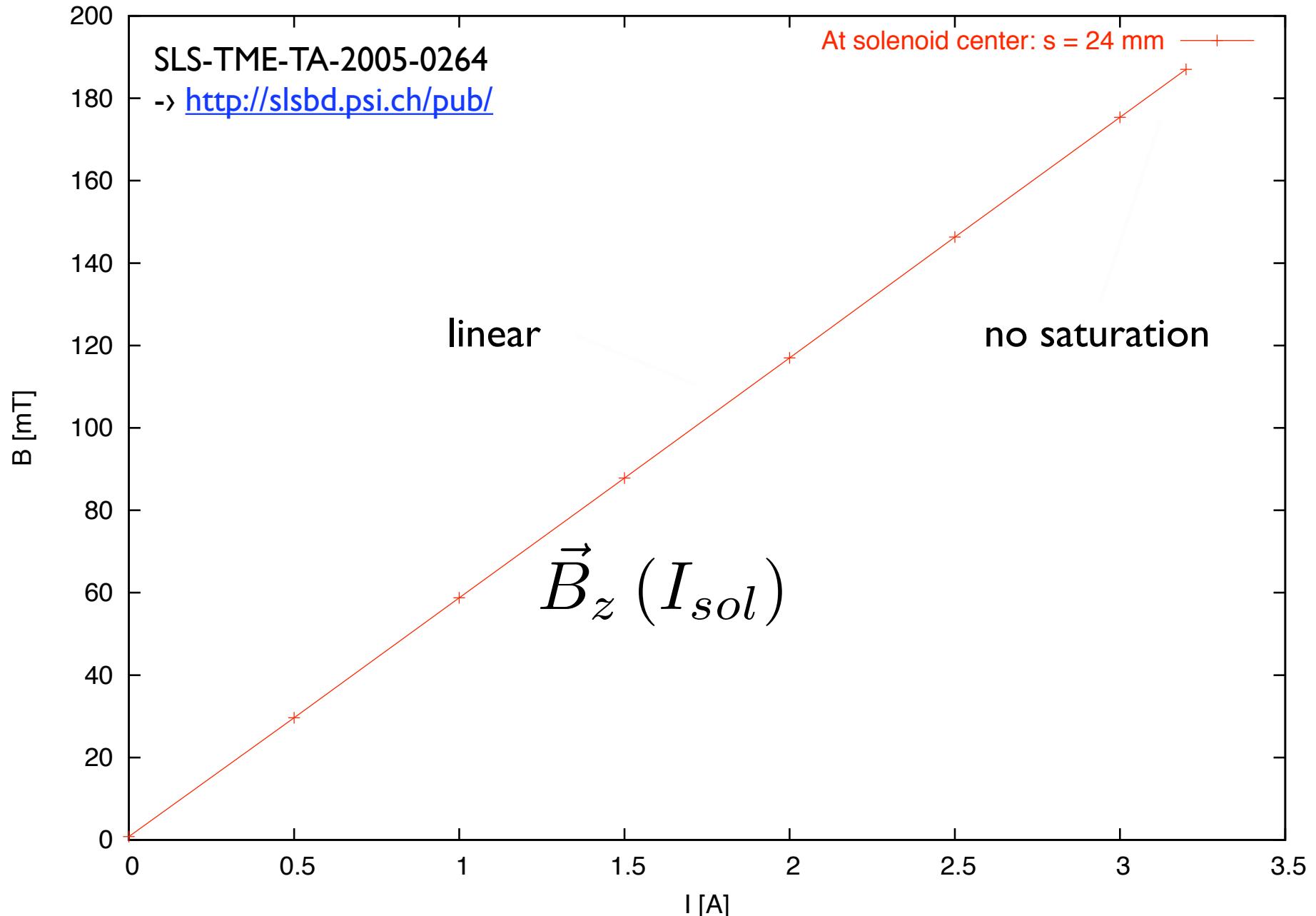
Hall probe

3D mover

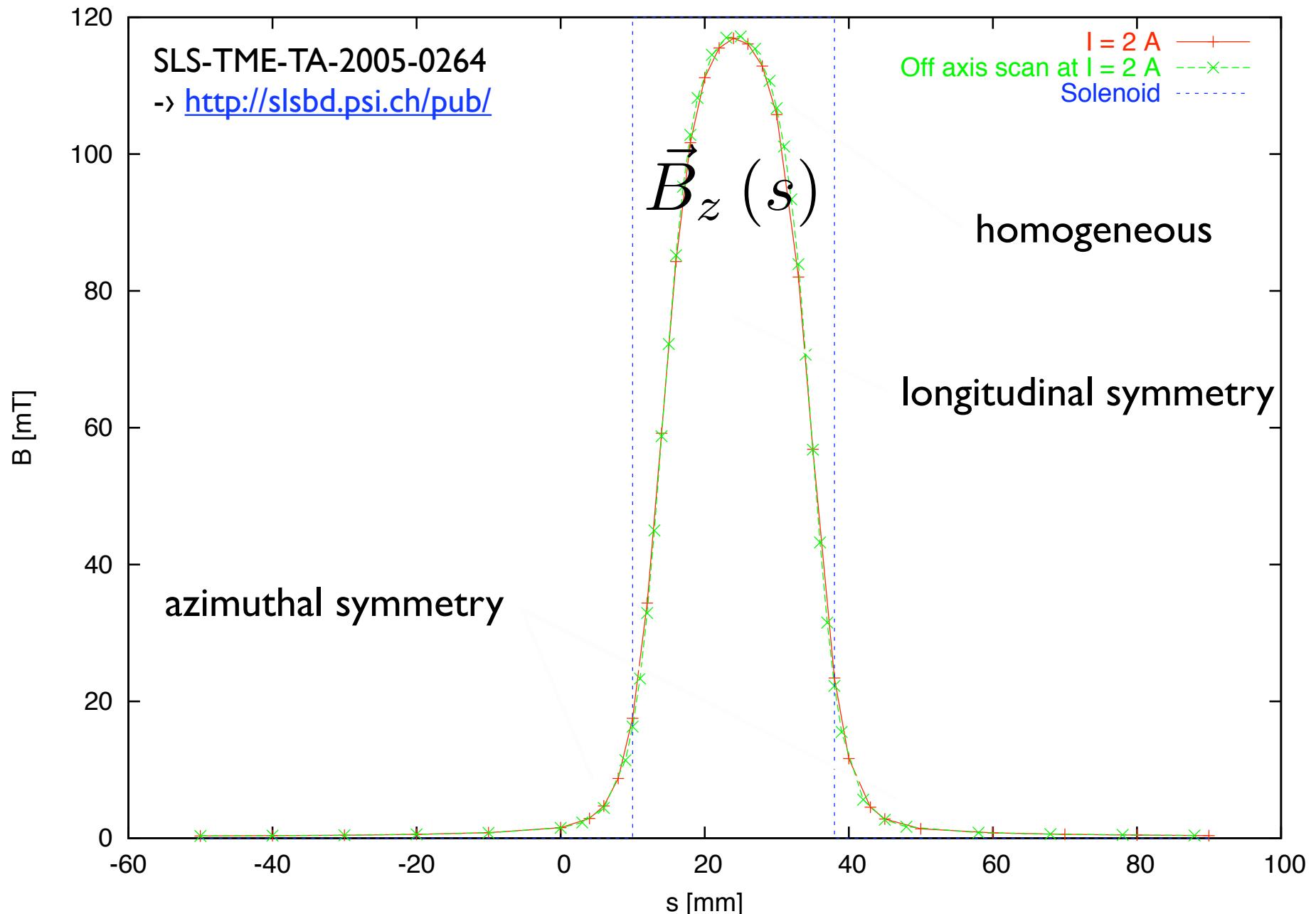
Solenoid temperature  
readout

Hall probe readout

# Solenoid Field Measurement Results (I)



# Solenoid Field Measurement Results (2)

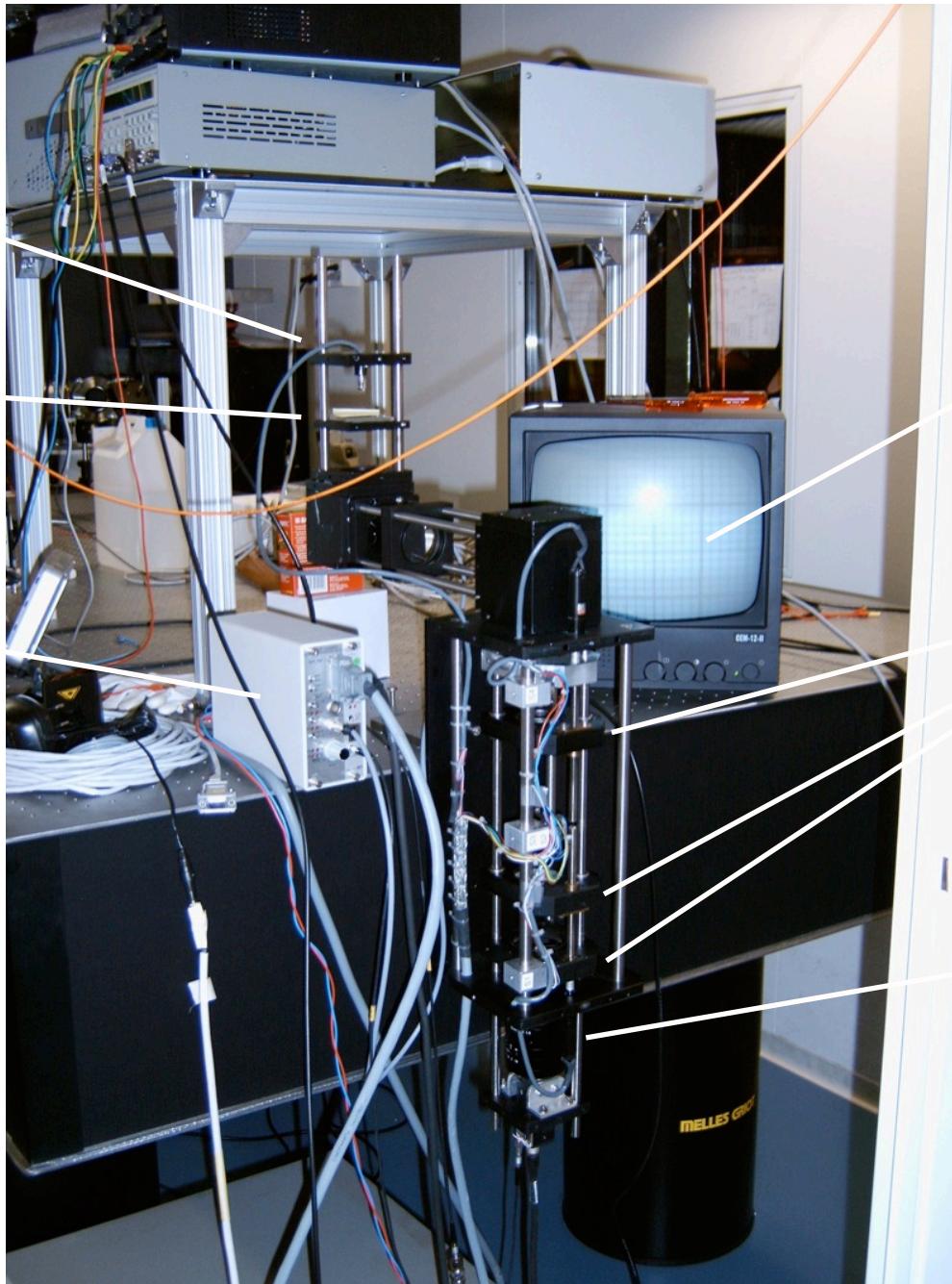


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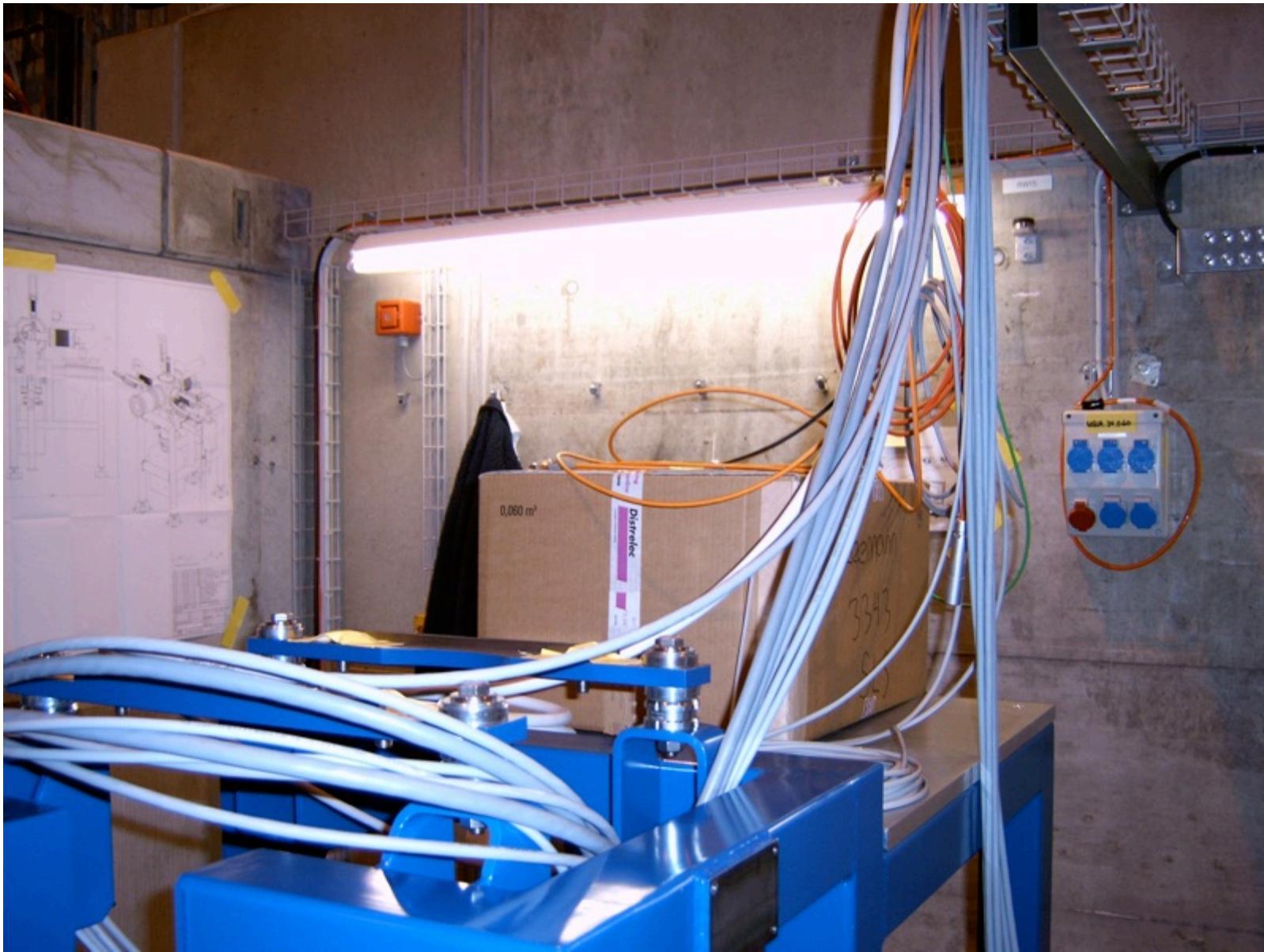
# Zoom Optics Resolution Measurement

Light  
Sample  
Controller



Screen  
Lenses  
Camera

# Connecting Diagnostics Cabling...



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