



WIR SCHAFFEN WISSEN – HEUTE FÜR MORGEN

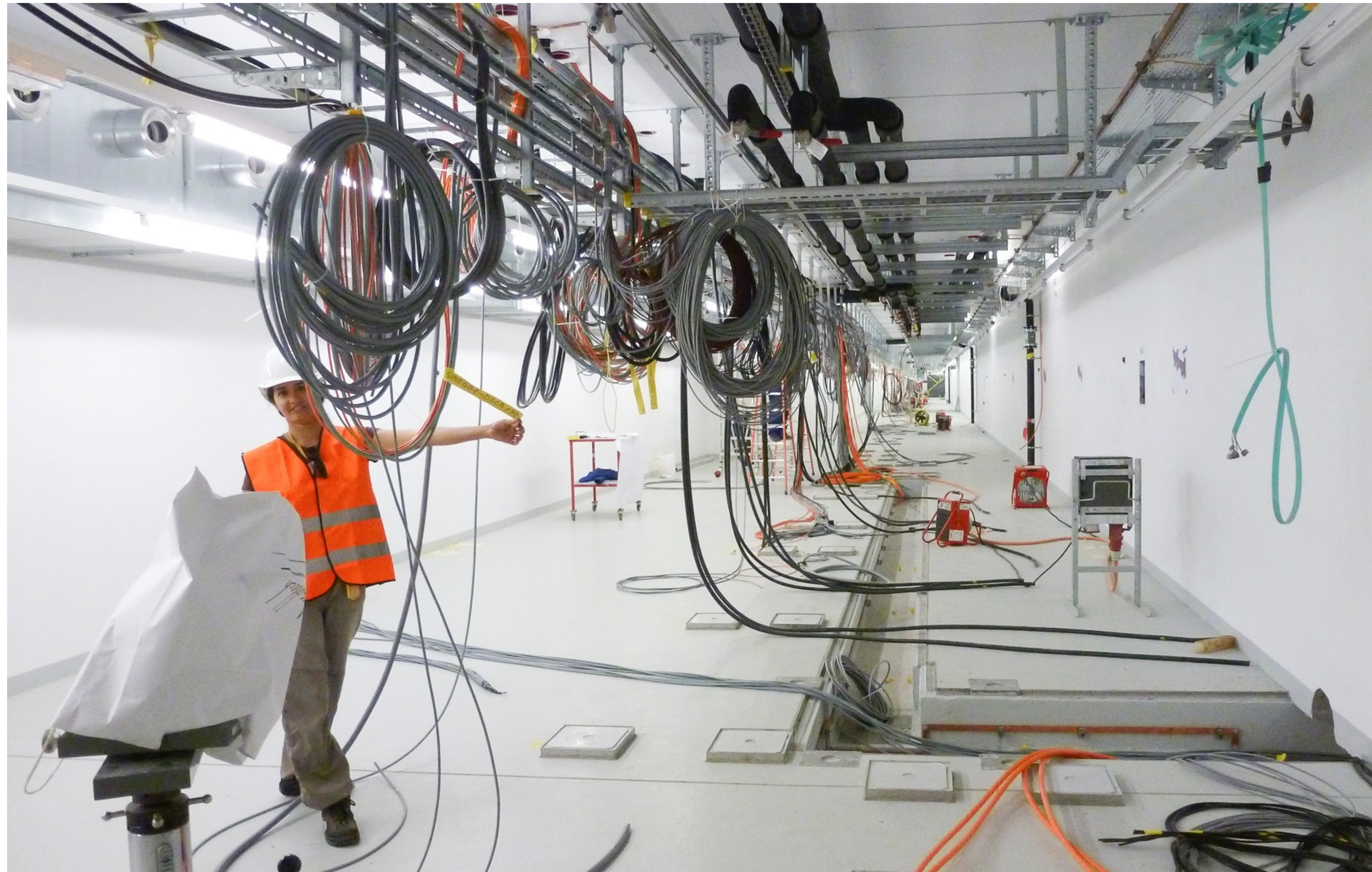
Rasmus Ischebeck

Longitudinal Diagnostics for SwissFEL Status

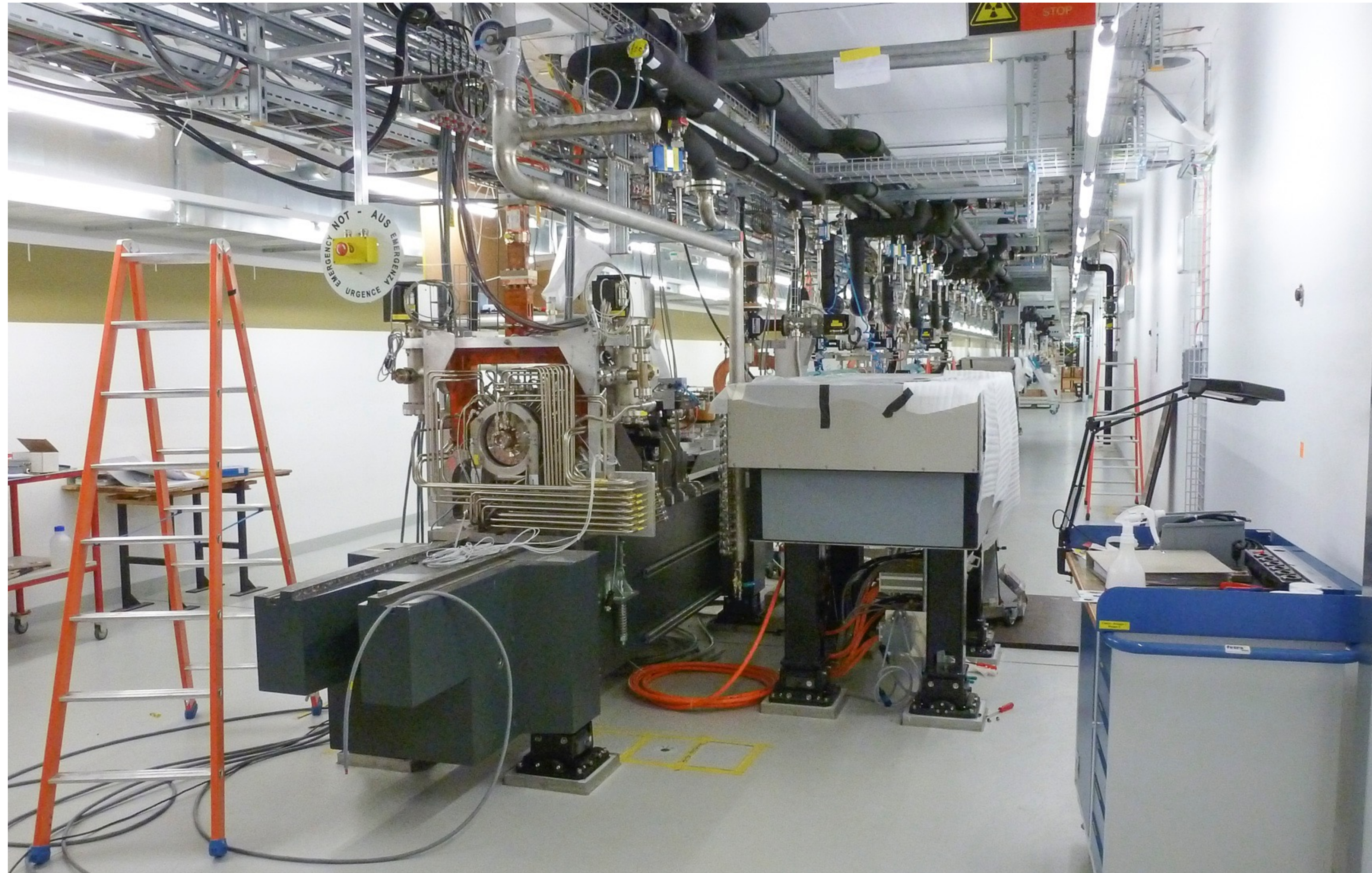
		2014							2015							2016							2017						
OSFA	Injector	civil constr. & infrastr.							Injector installation								Commissioning							Pilot experiments					
	Undulator-lab	civil constr. & infrastr.							Undulator assembly & measurement																				
	RF gallery	civil construction & infrastructure							klystron modulators 1-2							modulators 14-26													
	Linac & FEL tunnel								accelerator & FEL							Commissioning													
	Photon beamlines								Photon-beamline							Commissioning													
	Experiments															ESA &ESB installation							Commissioning						
WLHA		Injector beam tests		dismantling		Component pre-assembly and storage																							
ESFM		Component pre-assembly and storage																											
OBLA		C-band component powertests																											

Situation in SwissFEL Tunnel

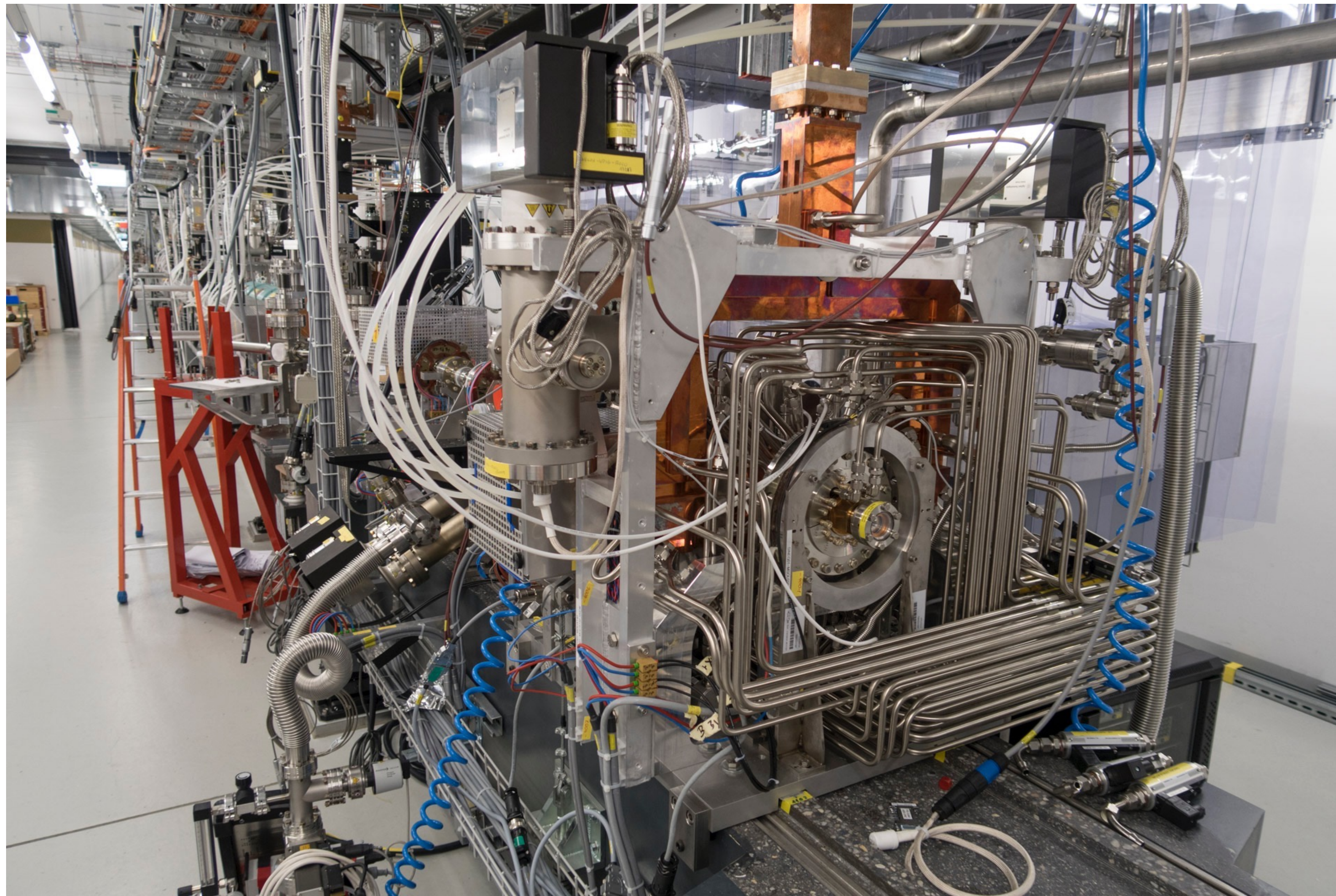
May 2015



Situation in SwissFEL Tunnel October 2015

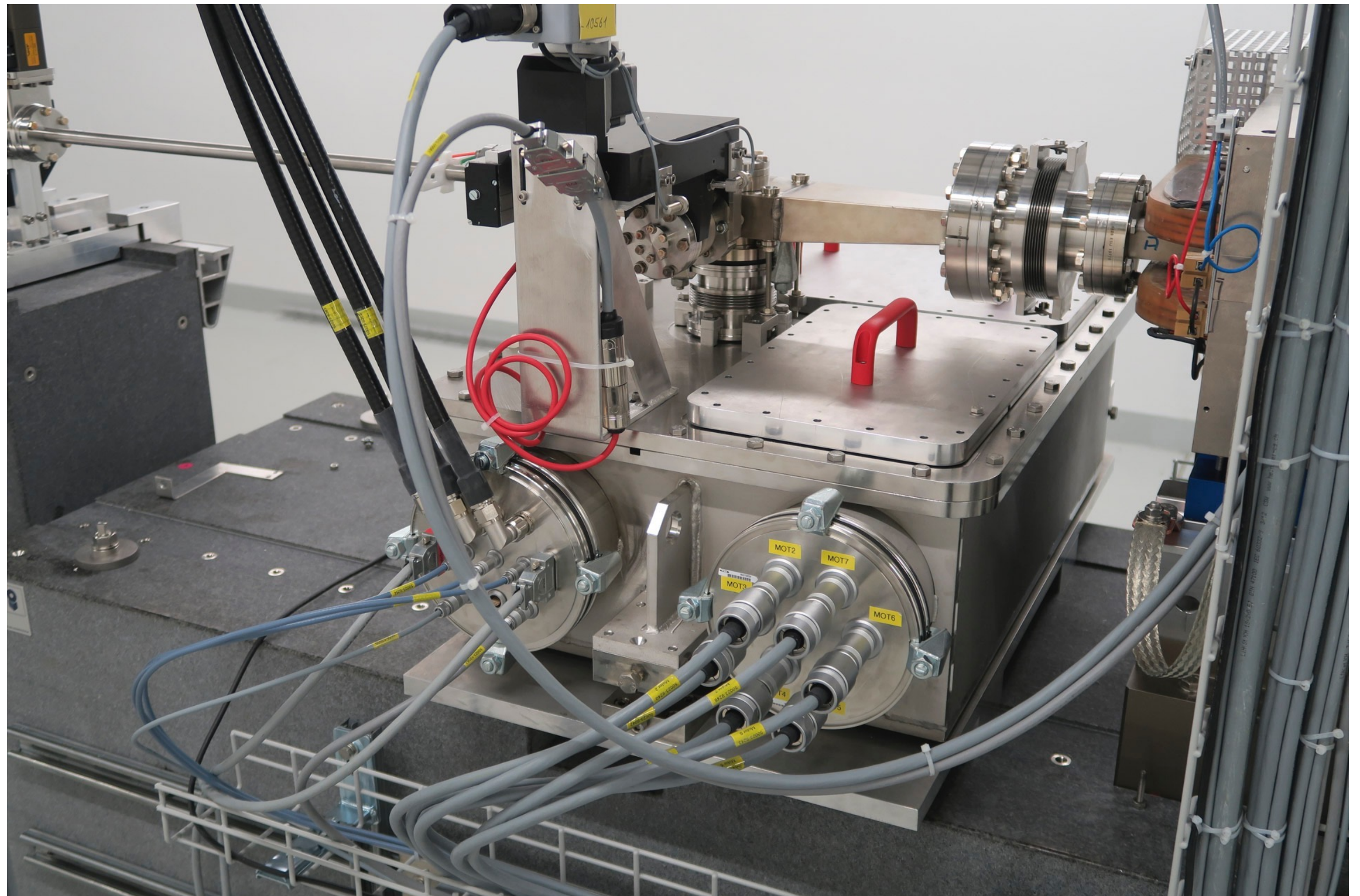


Situation in SwissFEL Tunnel October 2016



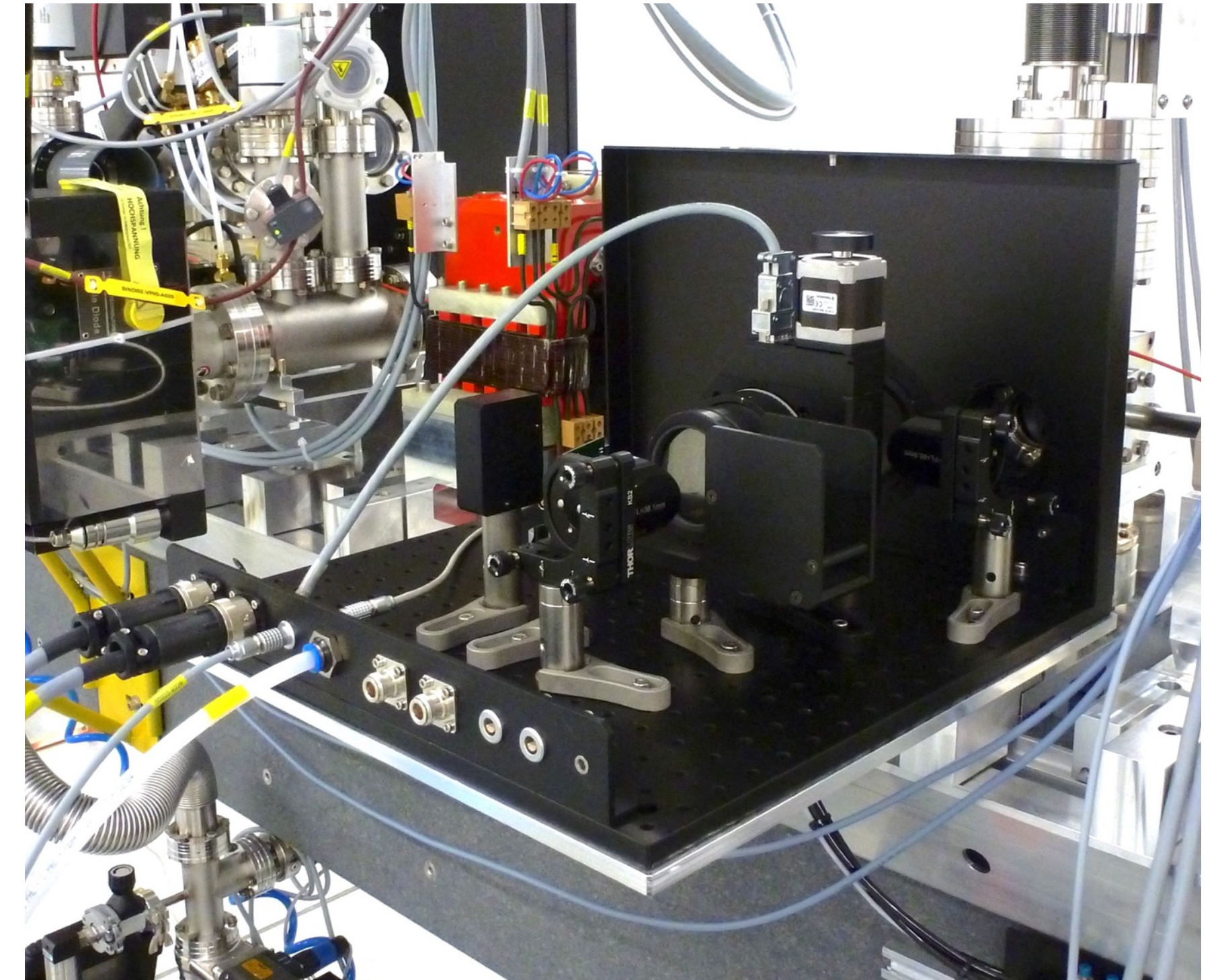
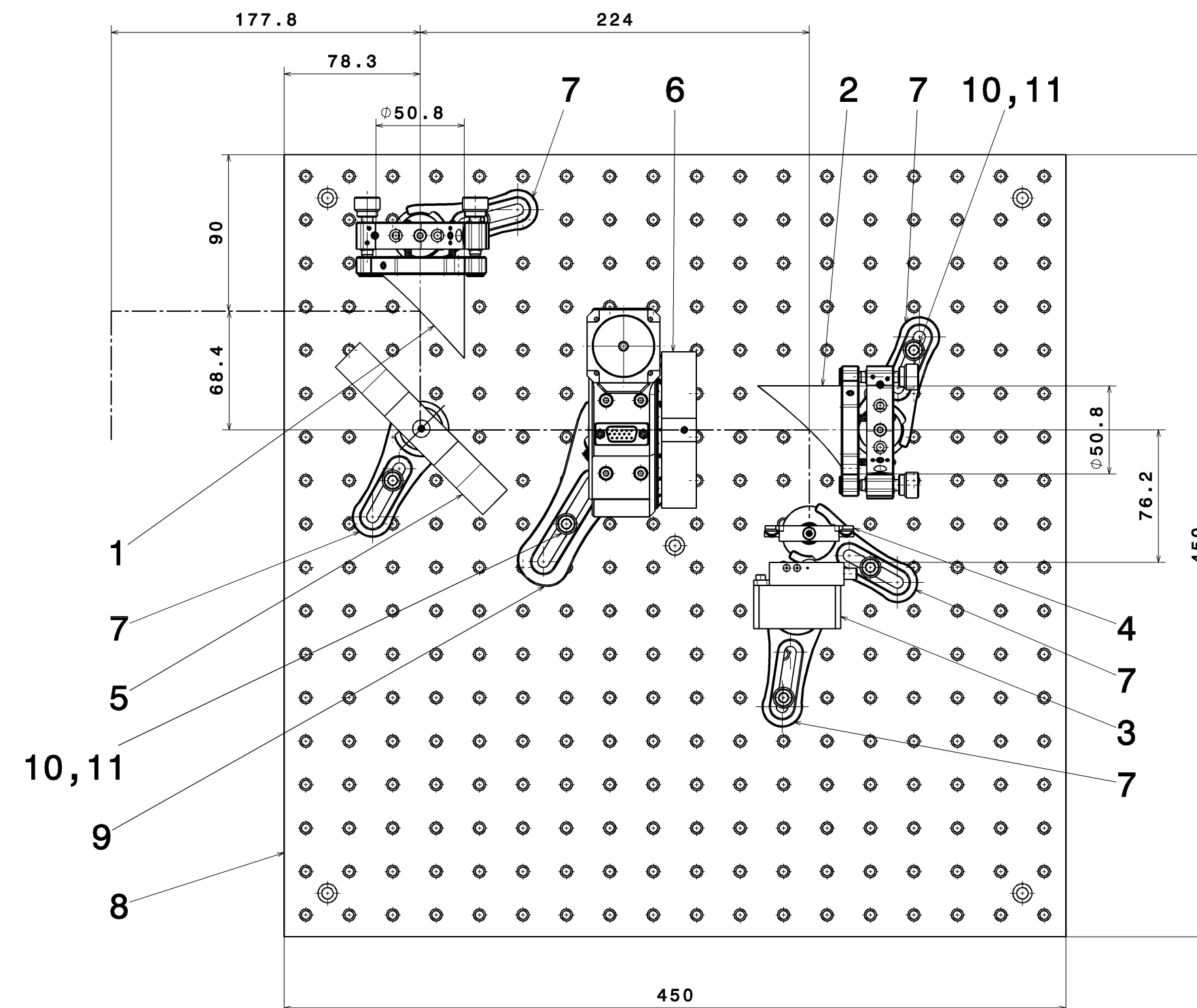
Compression Monitors — BC1 (SINBCo2)

- SRM:
 - vacuum chamber installed
- To be done:
 - Install detectors
 - Readout of detectors
 - Integration into feedback
- Expected completion: March 2017



Compression Monitors — BC1 (SINBCo2)

- CDR:
 - screen installed
- Possibility to perform experiments
 - on CDR spatial distribution
 - on detectors

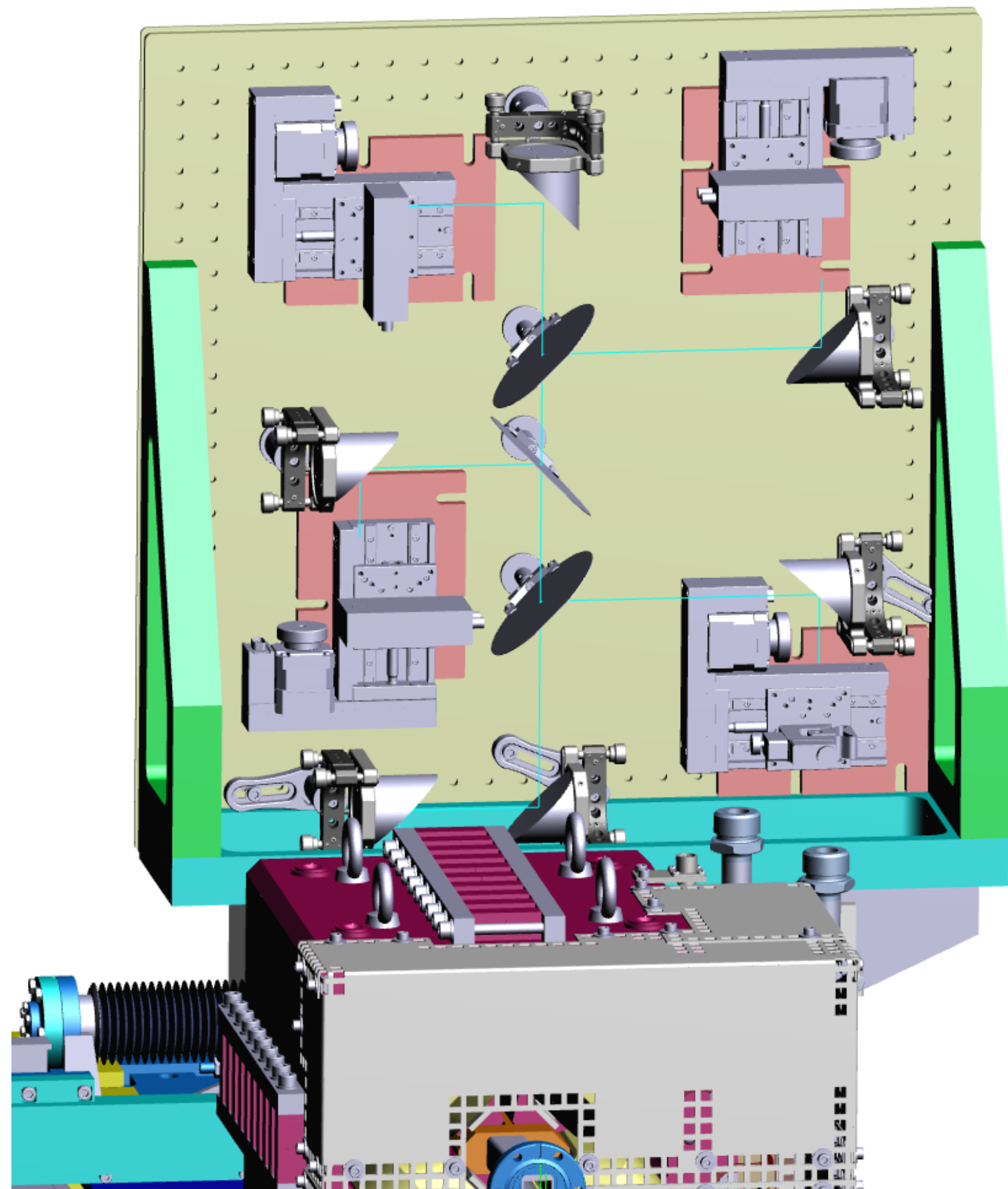


Compression Monitors — BC2 (S10BCo2)

- In-vacuum mirrors installed
- THz spectrometer pre-aligned
- Installation in progress:
 - Test of THz detectors
 - Transfer line
 - THz spectrometer
 - Installation of detectors and readout
- Measurements planned: Fall 2017
- Long-term:
 - Digitization of detector signals by PSI ADCs
 - Integration into feedbacks



Compression Monitors — BC₃ (ECOL)



- Design in progress
- Some open questions:
 - Detectors: are pyroelectric detectors sensitive enough?
 - Sensitivity adjustment by defocus?

- BC1
 - In-vacuum mirror installed
 - Camera installed
 - Camera server running
- To be done:
 - Focusing of camera
 - (Long-term): Integration into feedbacks
- BC2: Installation ongoing:
 - Alignment of in-vacuum mirror
 - Installation of camera
 - Cabling

