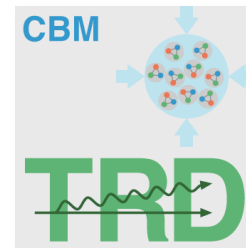


Laboratory Infrastructure Frankfurt

CBM-TRD Retreat

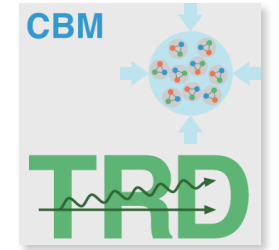
Schloß Waldthausen
Mainz, Germany
Mar. 27 – 29, 2019



Christoph Blume
University of Frankfurt



Overview



- Detector laboratories established for the construction of ALICE-TRD
 - Build and tested ~50 TRD chambers
 - Construction of MWPCs
 - Testing of front-end electronics
- Infrastructure unmodified since then
 - Used for CBM-TRD prototype construction
 - Preparation of ALICE-TPC ROCs for LHC-Run-III upgrades (GEM technology), being completed right now

Construction Room

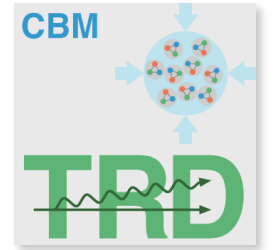
Preparation of chamber frames

Vacuum table for back panel construction
(new plate with adjusted holes needed)

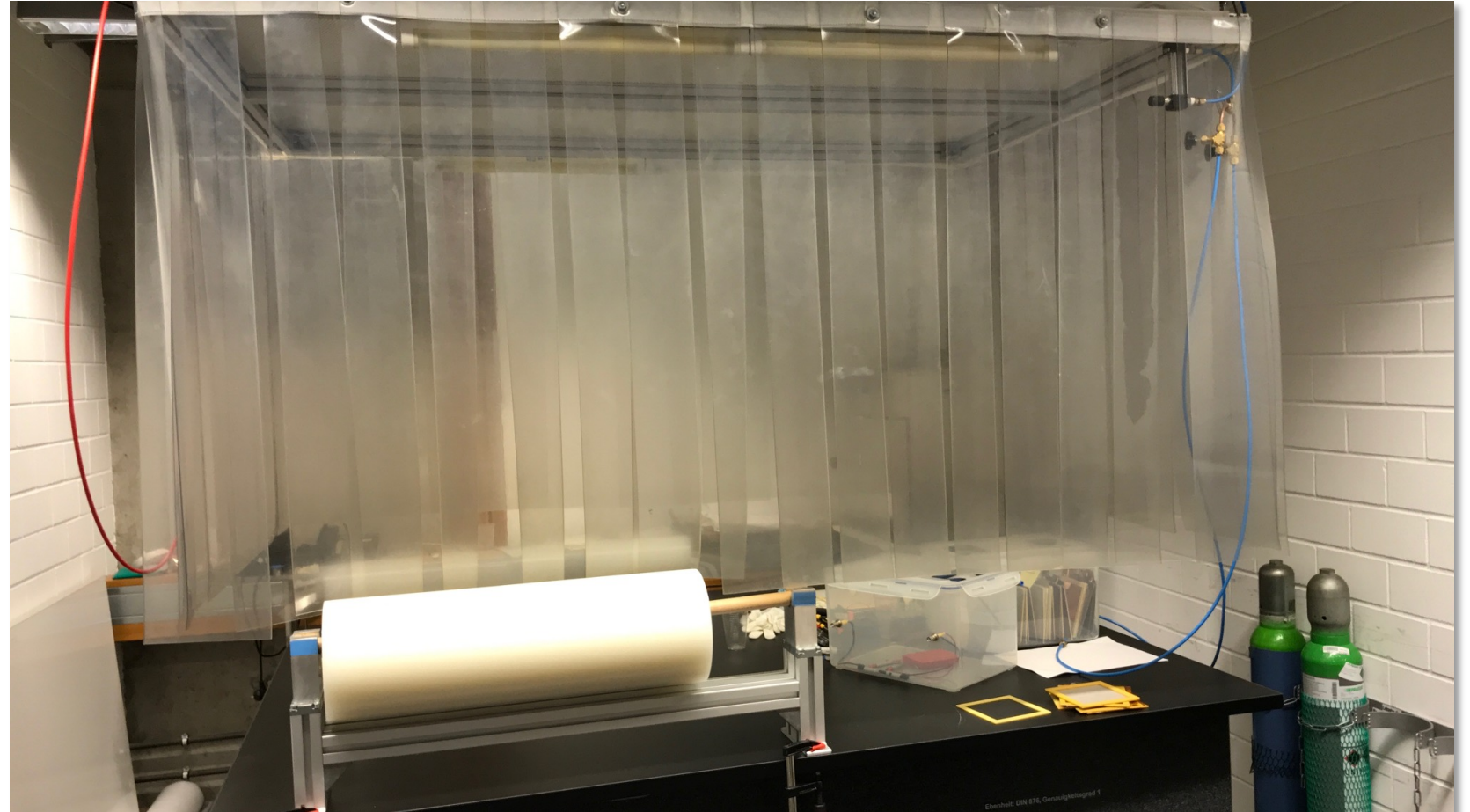
Storage of parts



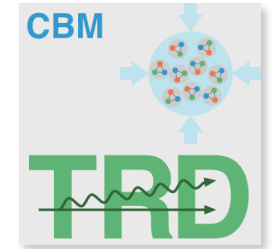
Assembly Room



Granite table
Precision: $< 12 \mu\text{m}$
(180cm \times 120cm \times 25cm)
Air flow box



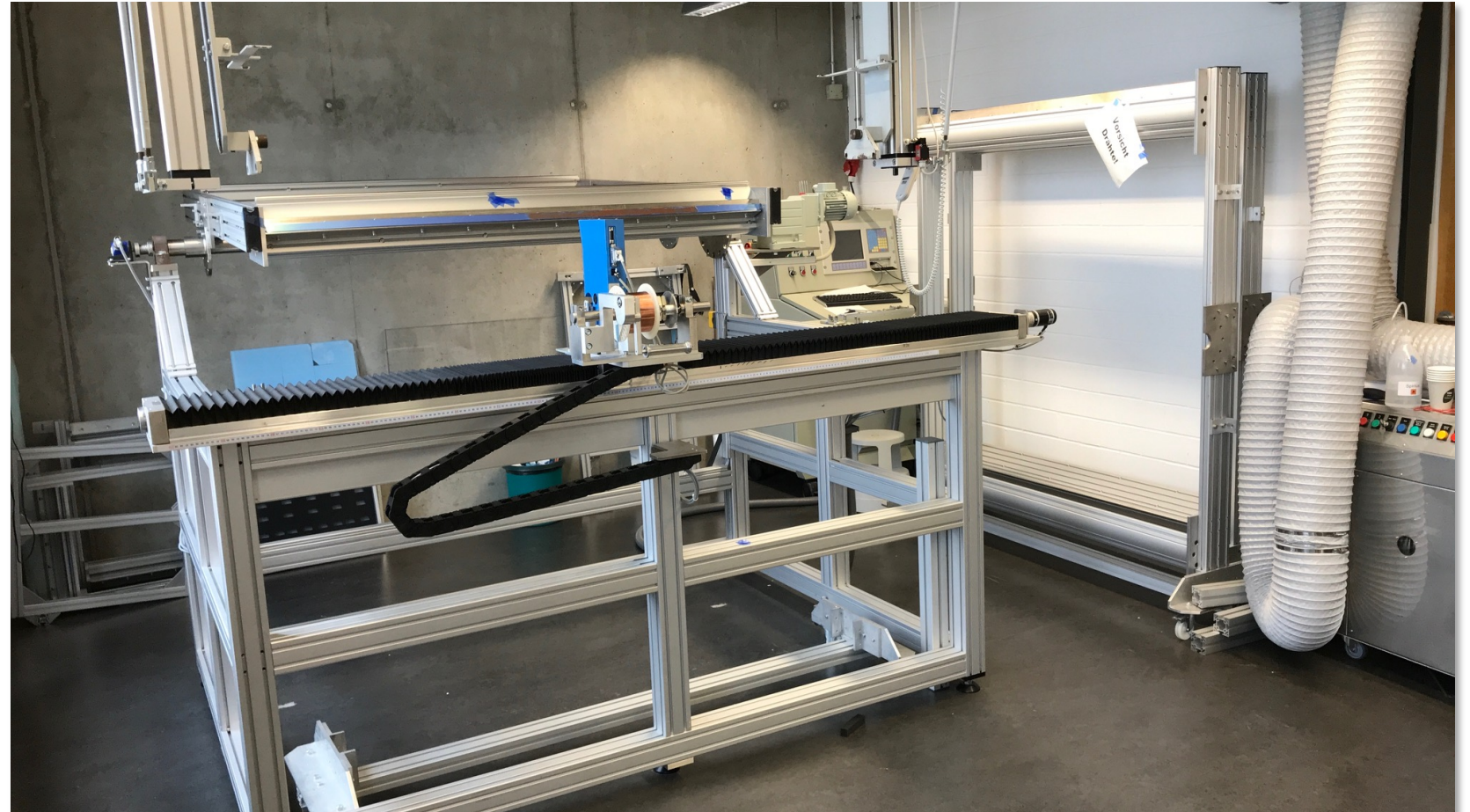
Clean Room



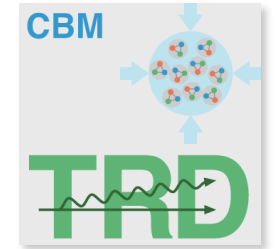
Wire winding machine

Portal crane for winding frames

Air cleaning devices



Clean Room

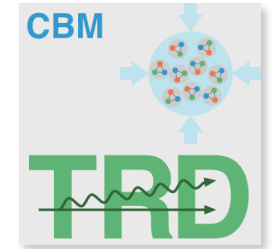


Device for an automated measurement of wire tension (new implementation)

Air cleaning devices



Test Room

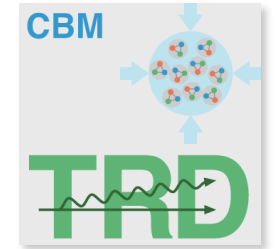


Automatized
x-y-test stand
for MWPCs

Measurement of
local gain factors



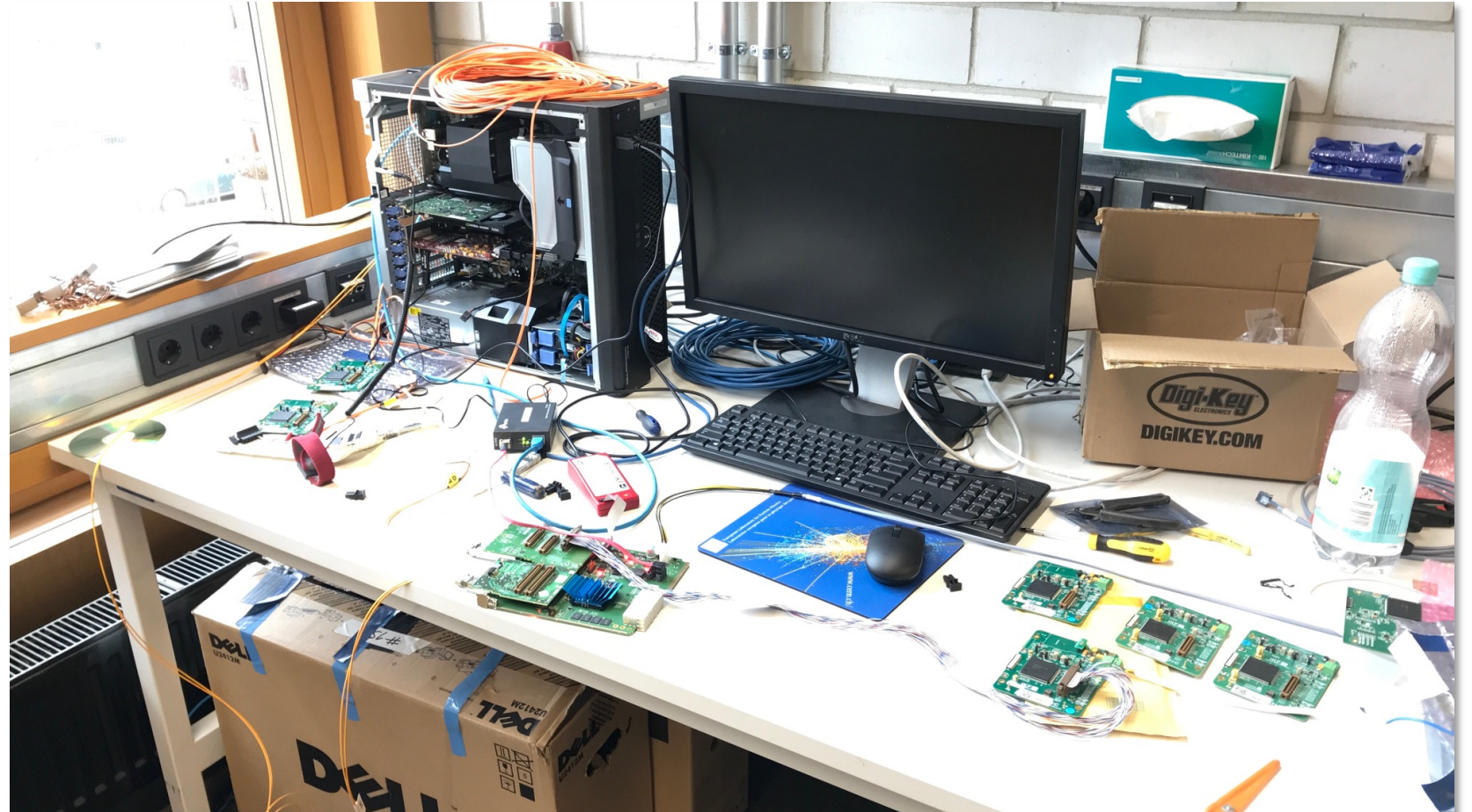
Test Room



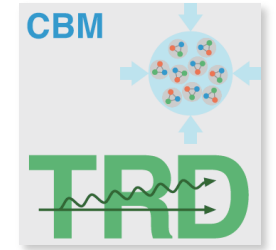
Space and equipment
for testing the
FEE-boards

Procedures need
to be developed

Currently being
used for firmware
development



Conclusion



- All necessary infrastructure available
 - Some cleaning and refurbishing to be done
 - New plate for vacuum table to be ordered
 - Foil stretching device?
 - FEE test procedures to be developed
- Storage space
 - Unclear what can be provided in Frankfurt
 - How much will be needed?
 - Chamber supposed to be installed in cave as soon as ready