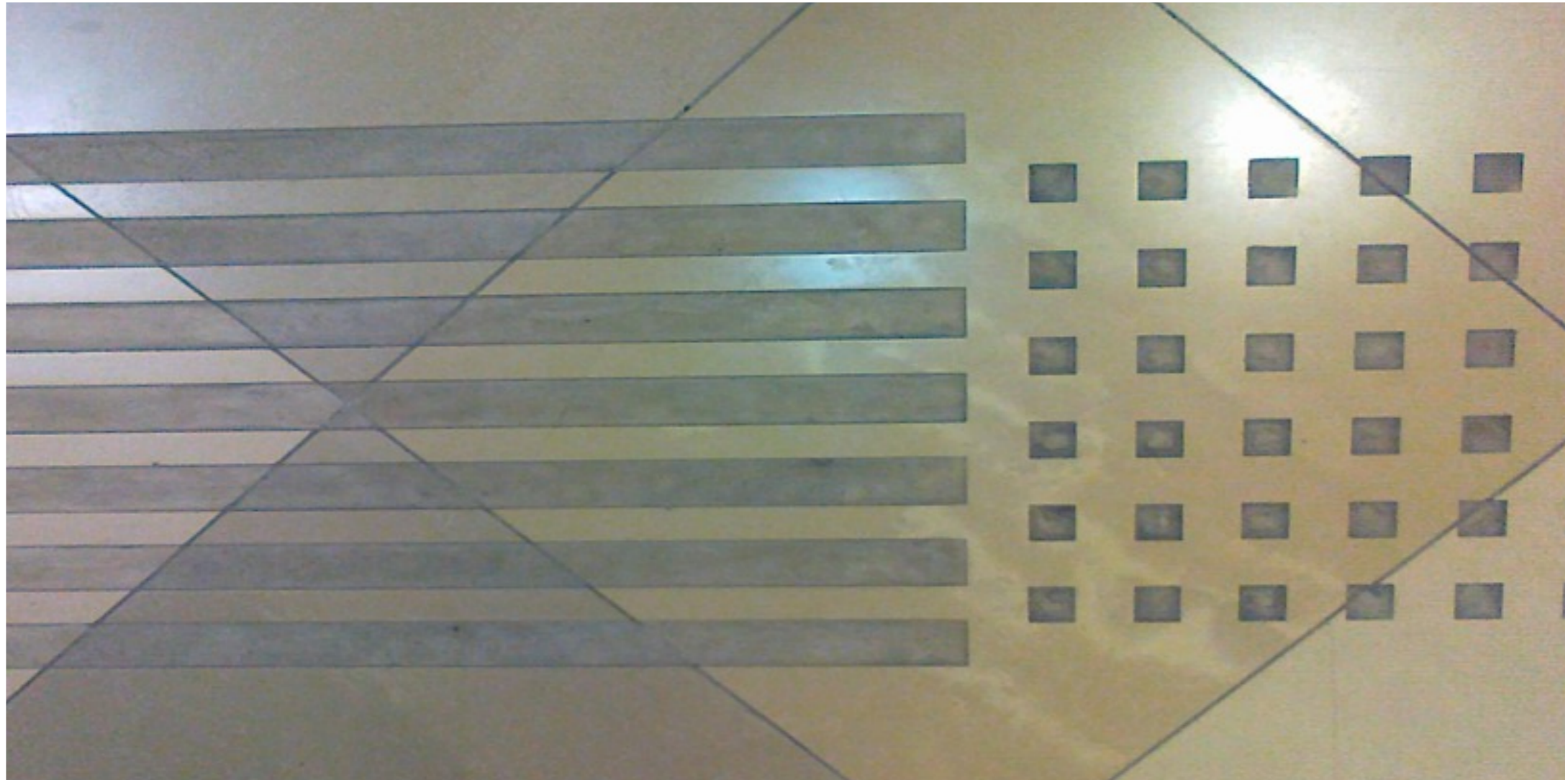


SVD PXD



Status of Cooling and Mockup at DESY

SVD PXD



Intriguing foresight of Austrian architects

Status & Goals

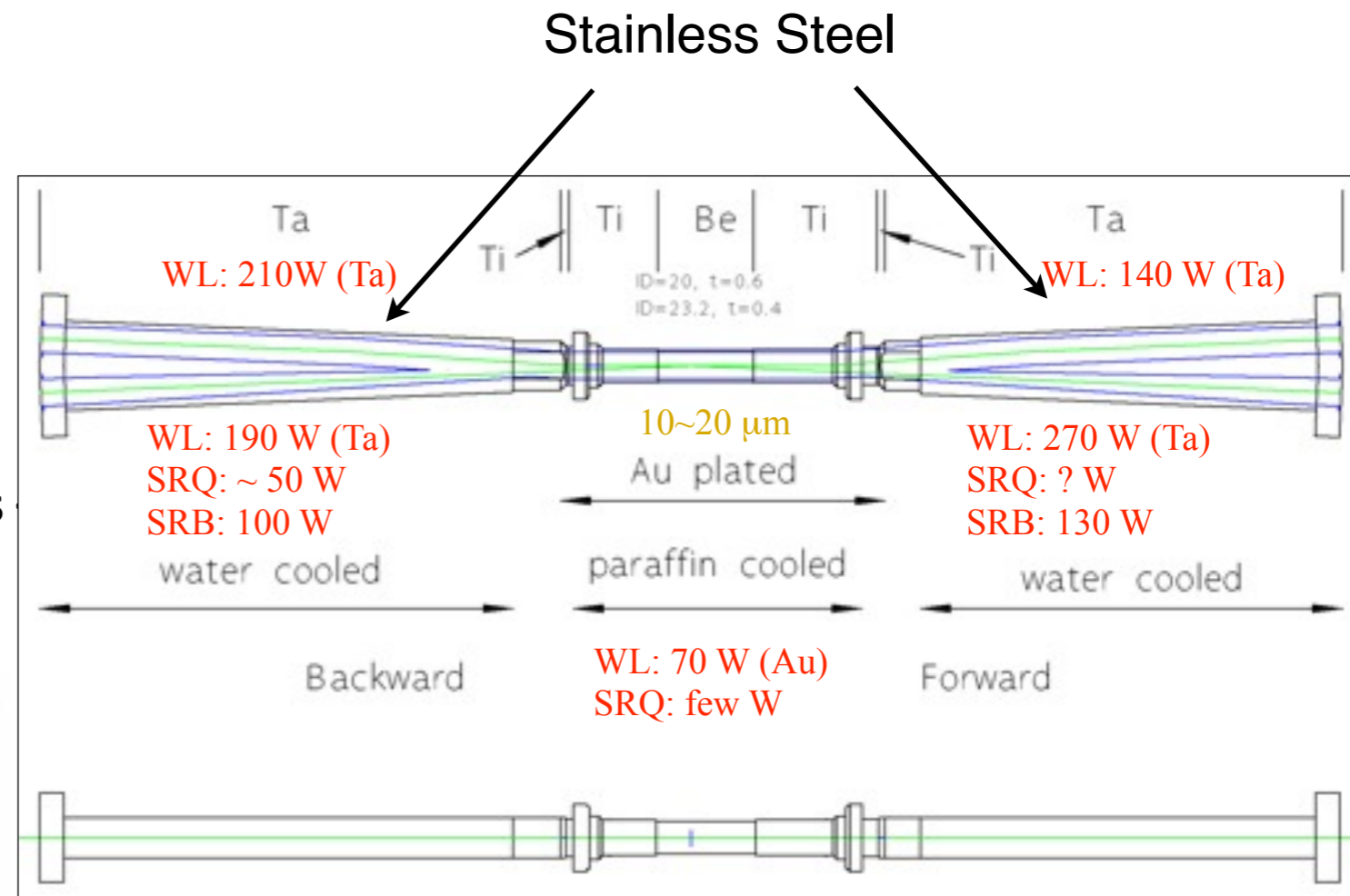
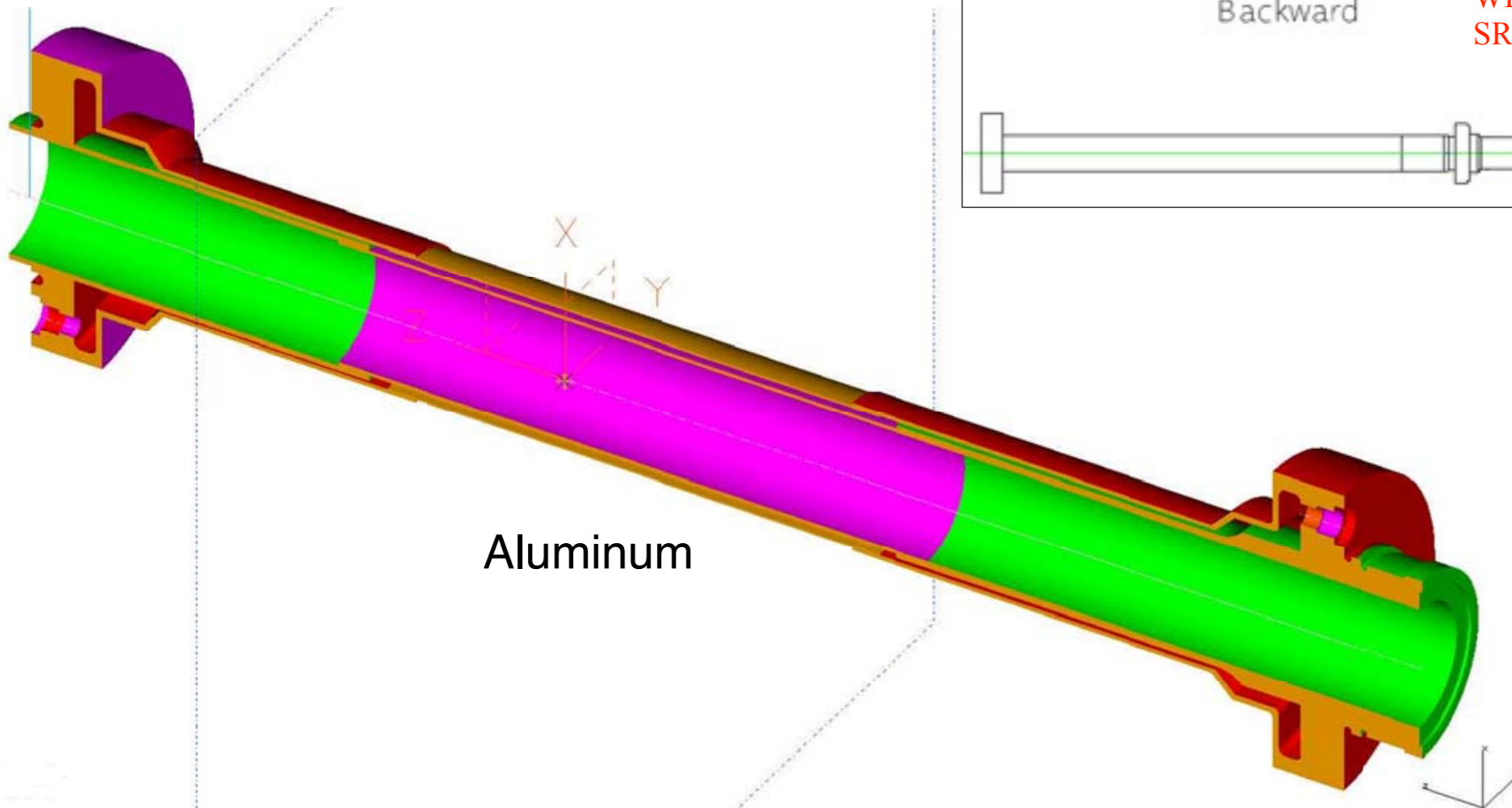
- Proof of principle for individual cooling strategies/systems existing already
 - a lot of work has been done by Valenica, MPI, Vienna, Karlsruhe, KEK
 - ▶ beam pipe cooling
 - ▶ CO₂ cooling
 - ▶ forced convection
- Complete full-size thermal mockup not yet available
 - verify overall concept by simulating interplay between various heat sources and cooling systems
 - ▶ beam pipe
 - ▶ PXD & SVD
 - ▶ thermal enclosure
 - ▶ CDC inner wall
- Manpower at DESY
 - Karsten Gadow, Robert Volkenborn (engineers, part time)
 - NN (technician, selection process ongoing)
- Presently still in the process of setting up infrastructure

First Steps

- Work from inside outwards
 - start with central beam pipe
 - emulate thermal properties of all components as closely as possible (with reasonable effort)

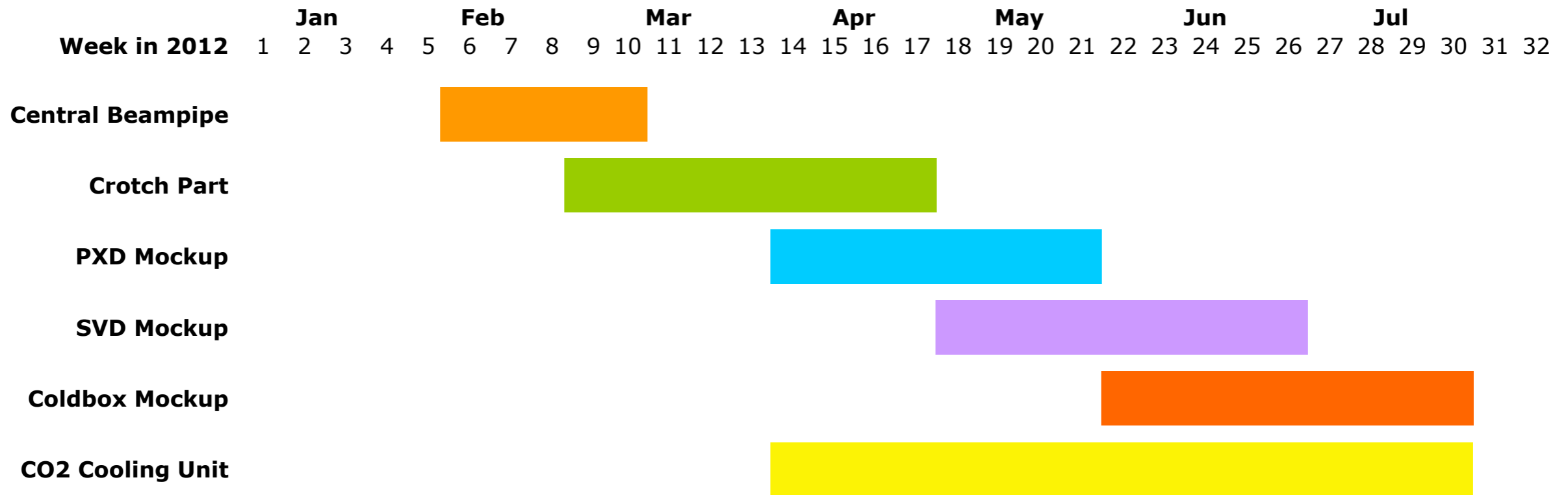
BELLE II beampipe mechanical status

Volkenborn / Gadow



Next Steps

- Tentative request submitted to central DESY workshop



- Discuss which parts of mechanical mockup (KEK) can possibly be recycled?
- CO₂ cooling
 - plan to copy MARCO system as soon as design has settled
 - back-up solution: parasitic use of existing system at DESY (AGIPD/XFEL)