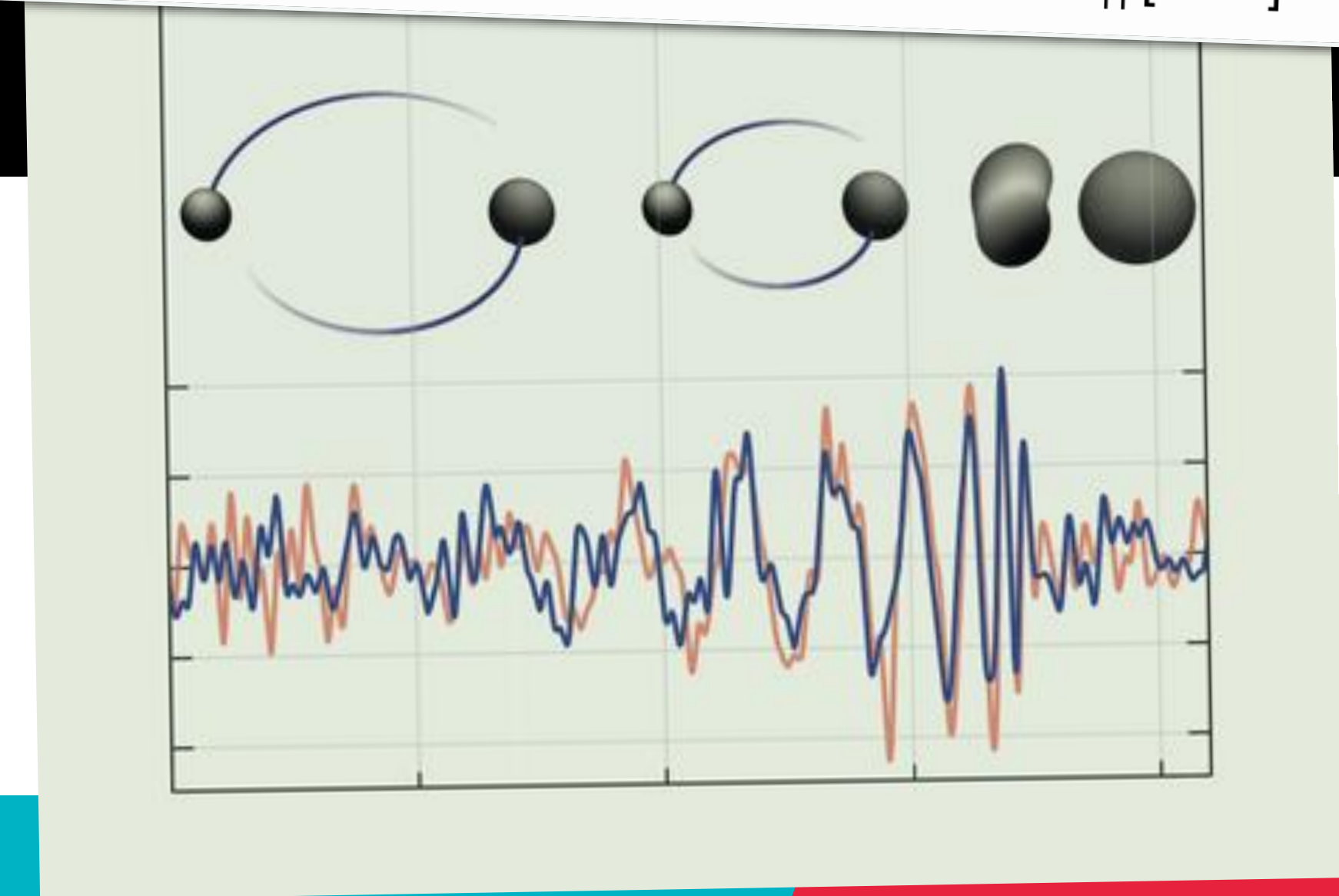
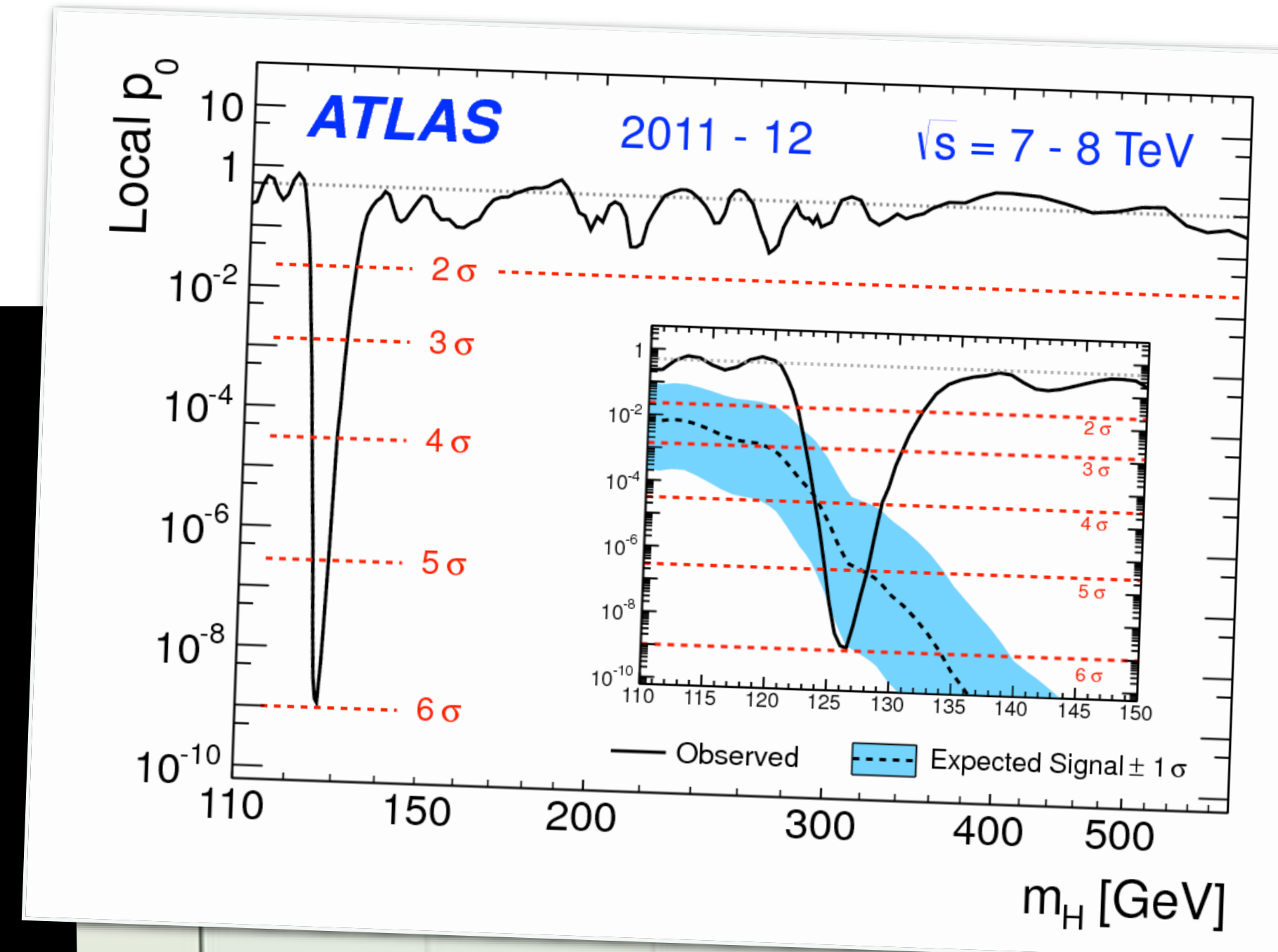
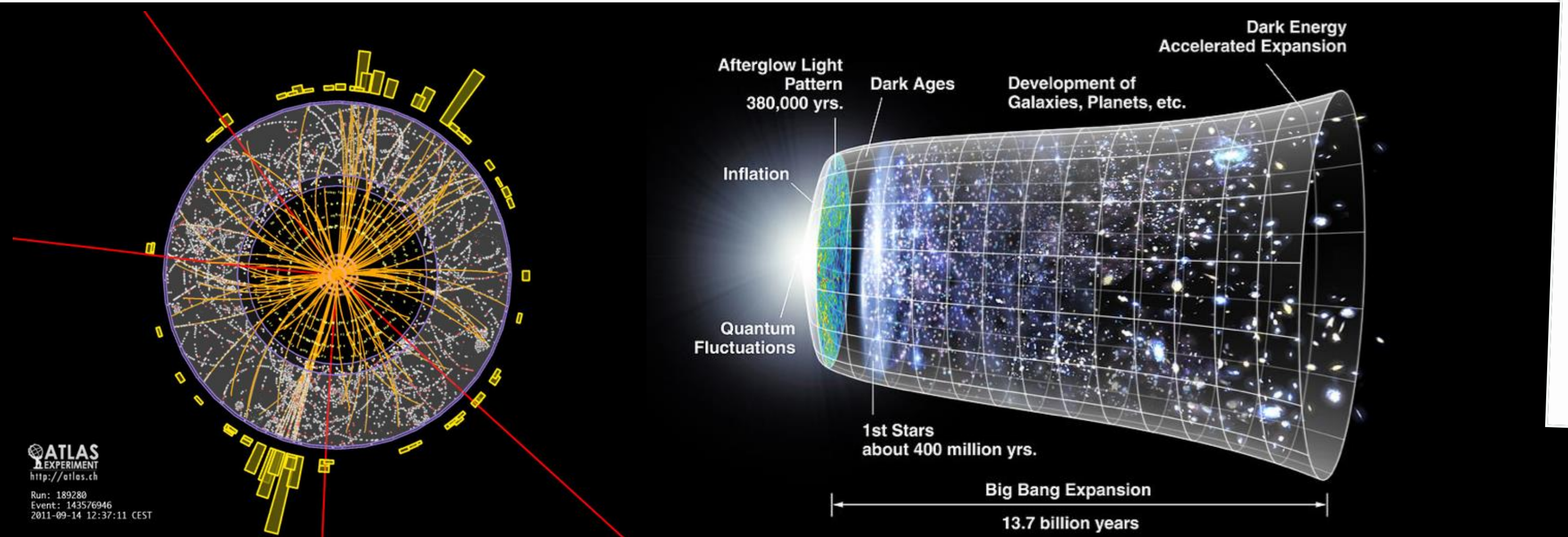




Monday 3 June 2024
Jan Visser

We study the interaction and structure of all elementary particles and fields

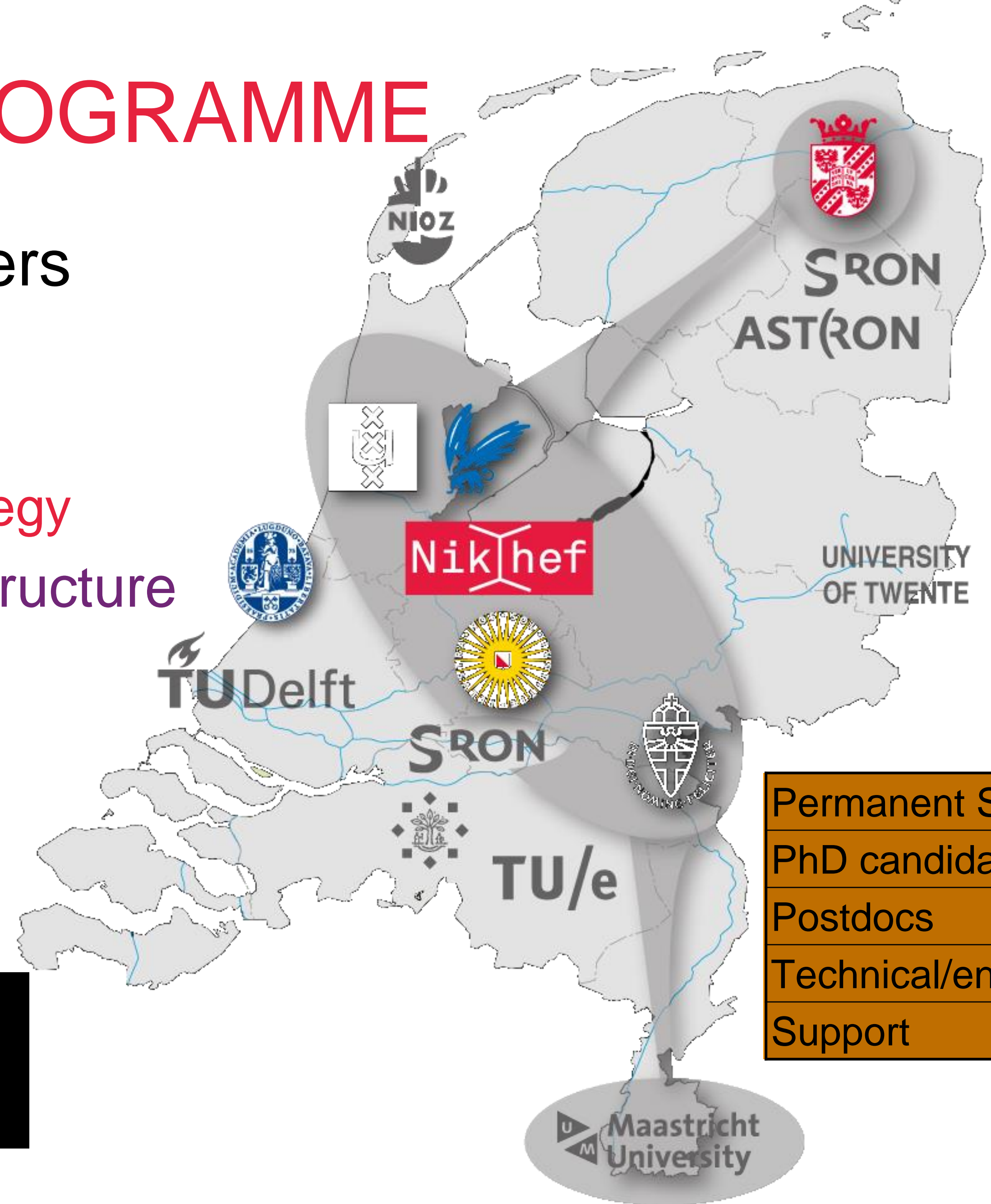


- Collider physics (i.e. CERN)
- Astroparticle physics
- Knowledge and technology transfer

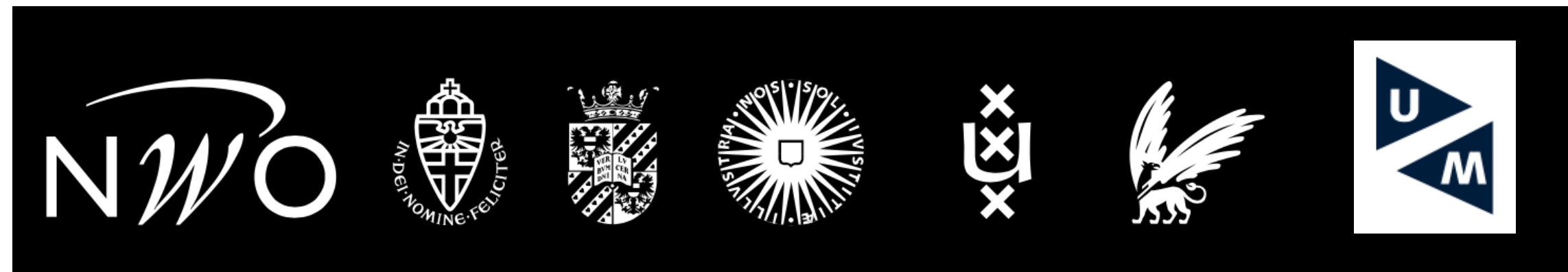
NATIONAL SCIENCE PROGRAMME

NWO institute and University partners

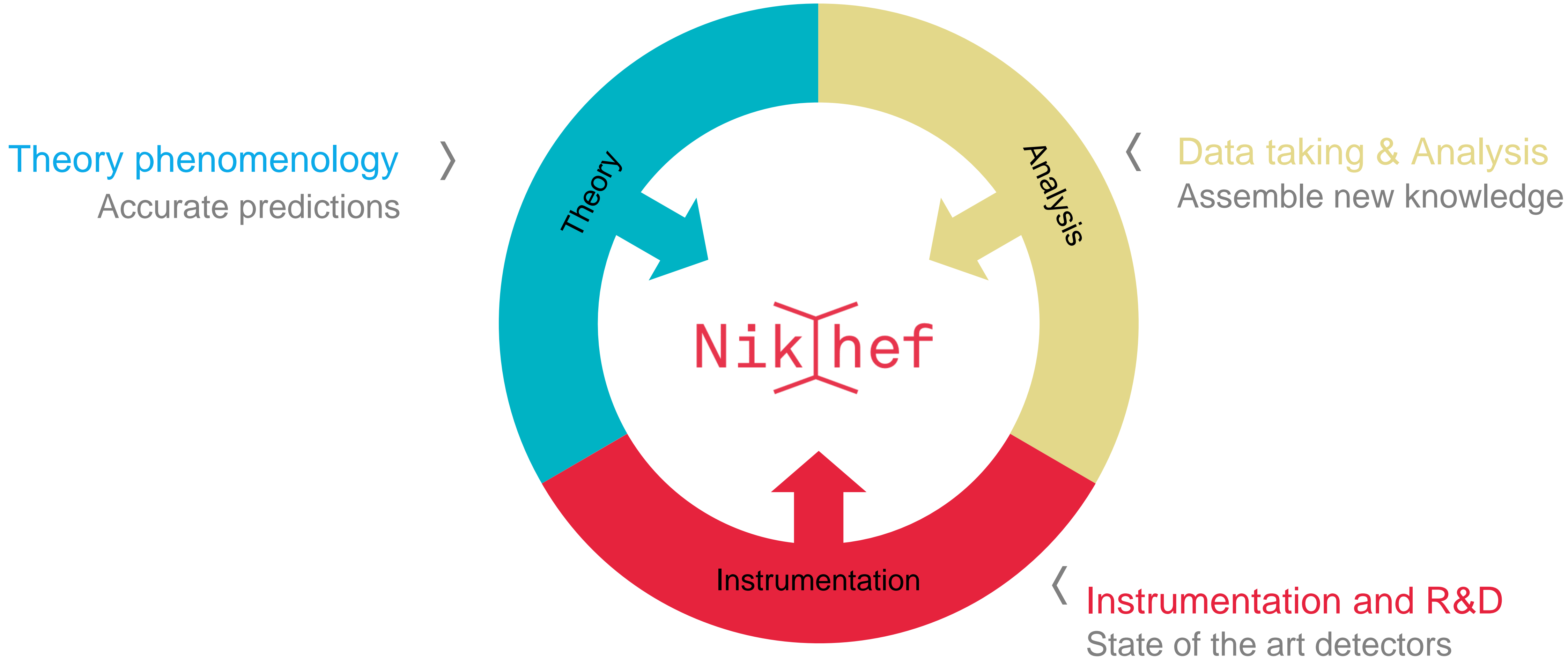
- University partners in key positions
 - Leaders of the scientific programs
 - Comply to the Nikhef National strategy
- Added value Nikhef institute infrastructure
 - Technical competence and support
 - Large computing infrastructure
 - Long term strategy & commitment
- Focus and mass in world-top expts



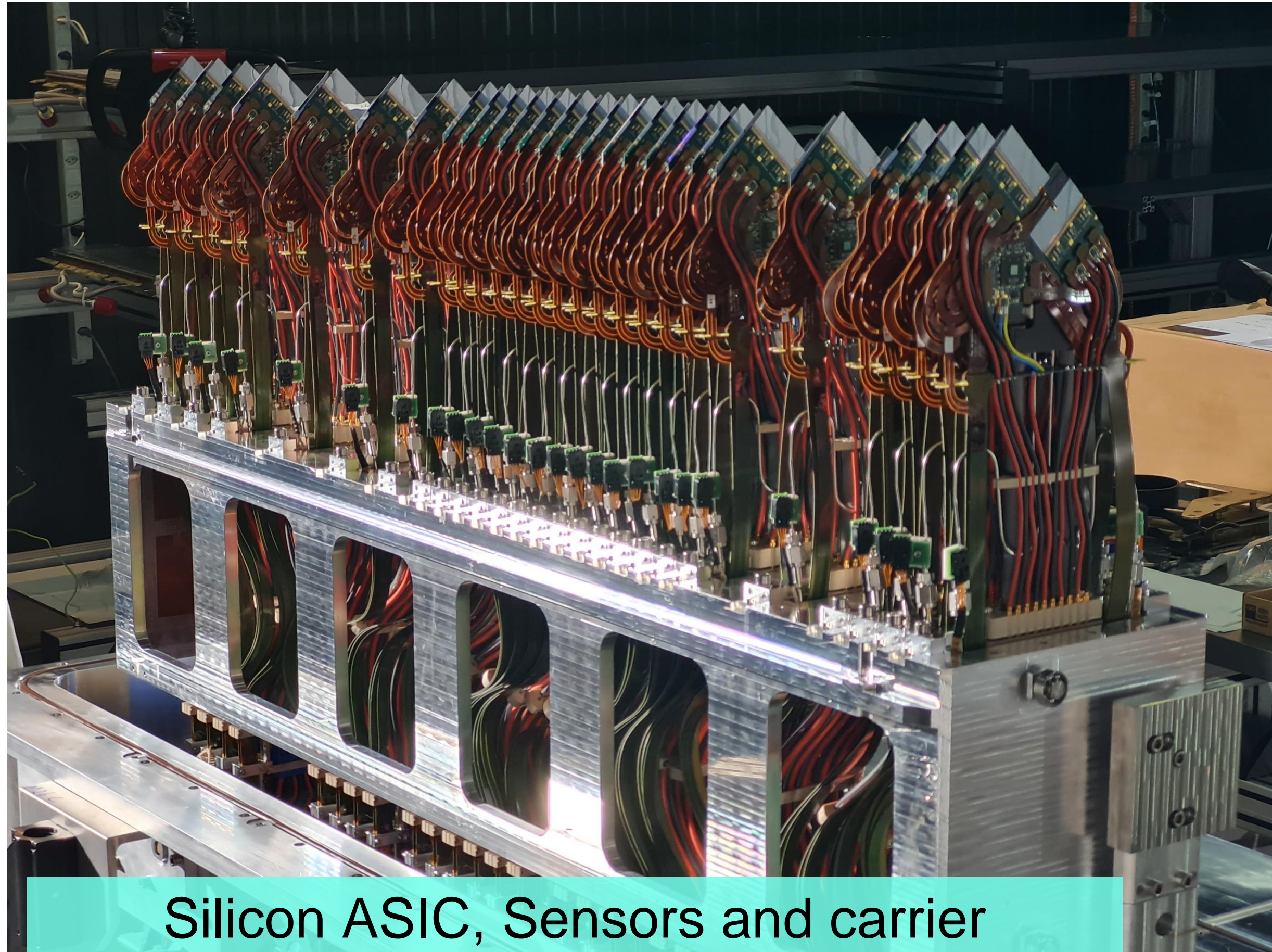
Permanent Staff	93
PhD candidates	125
Postdocs	43
Technical/engineer	88
Support	33



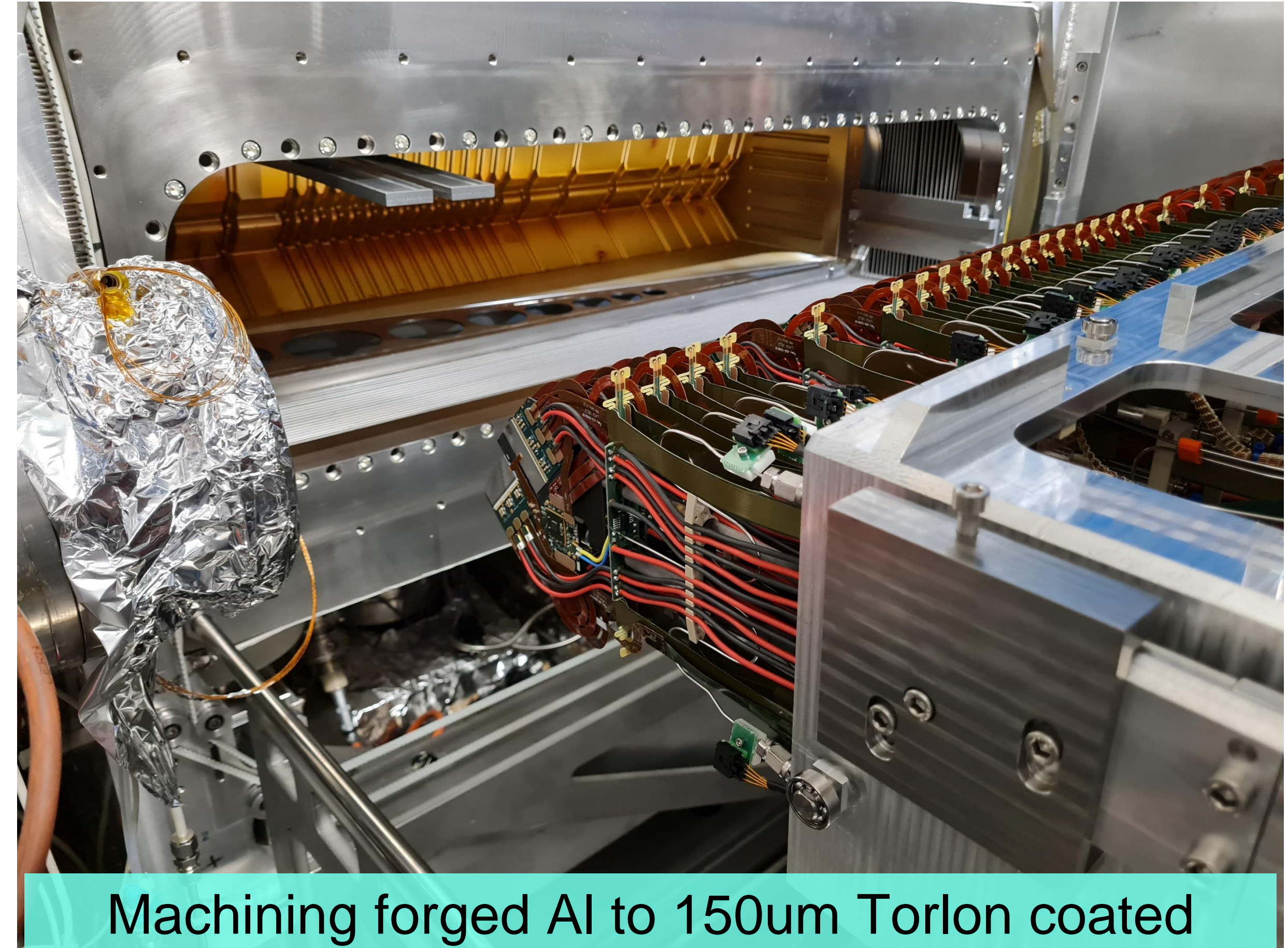
THE NIKHEF ECO SYSTEM



VERTEX DETECTOR LCHB

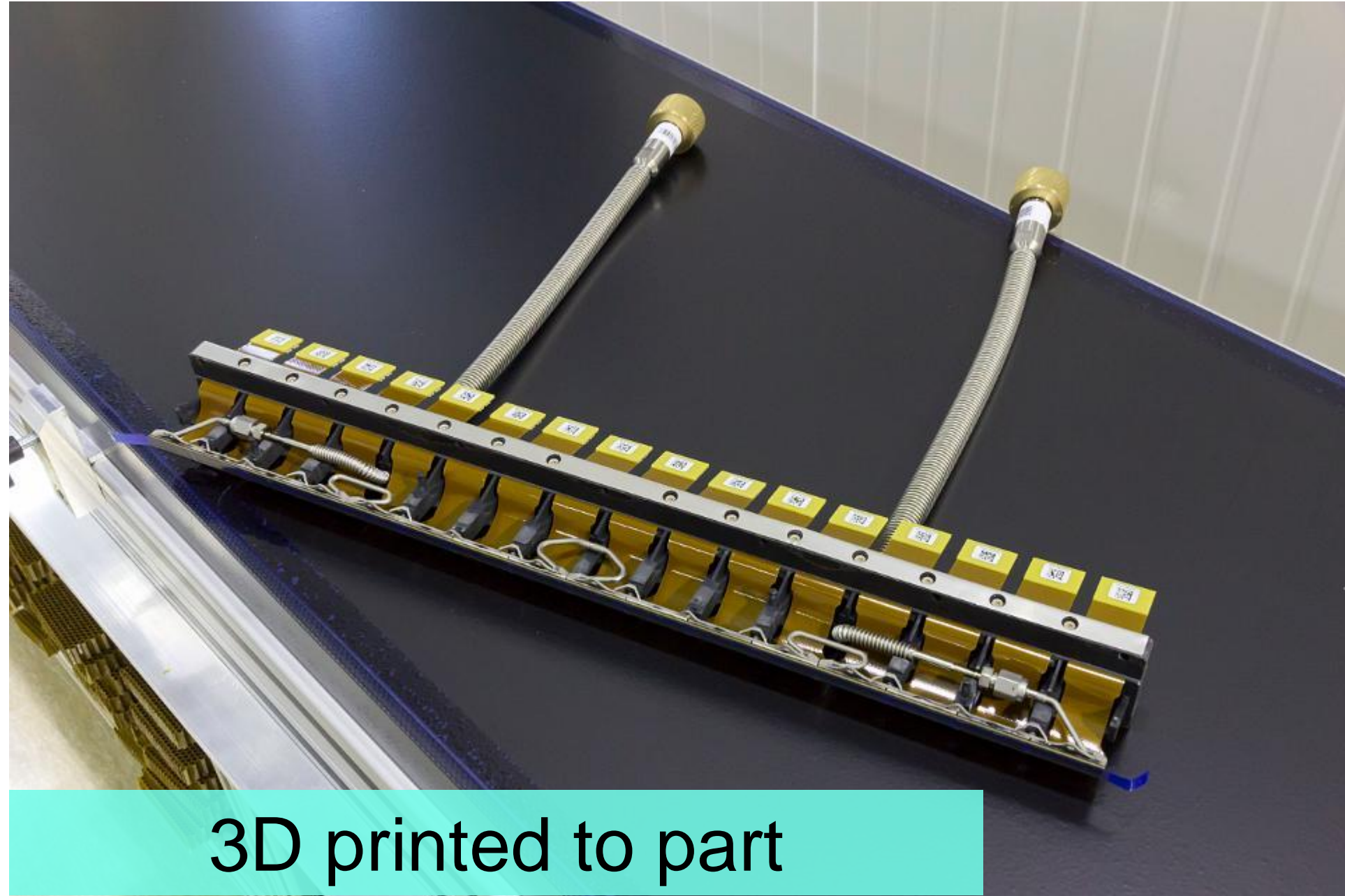


Silicon ASIC, Sensors and carrier

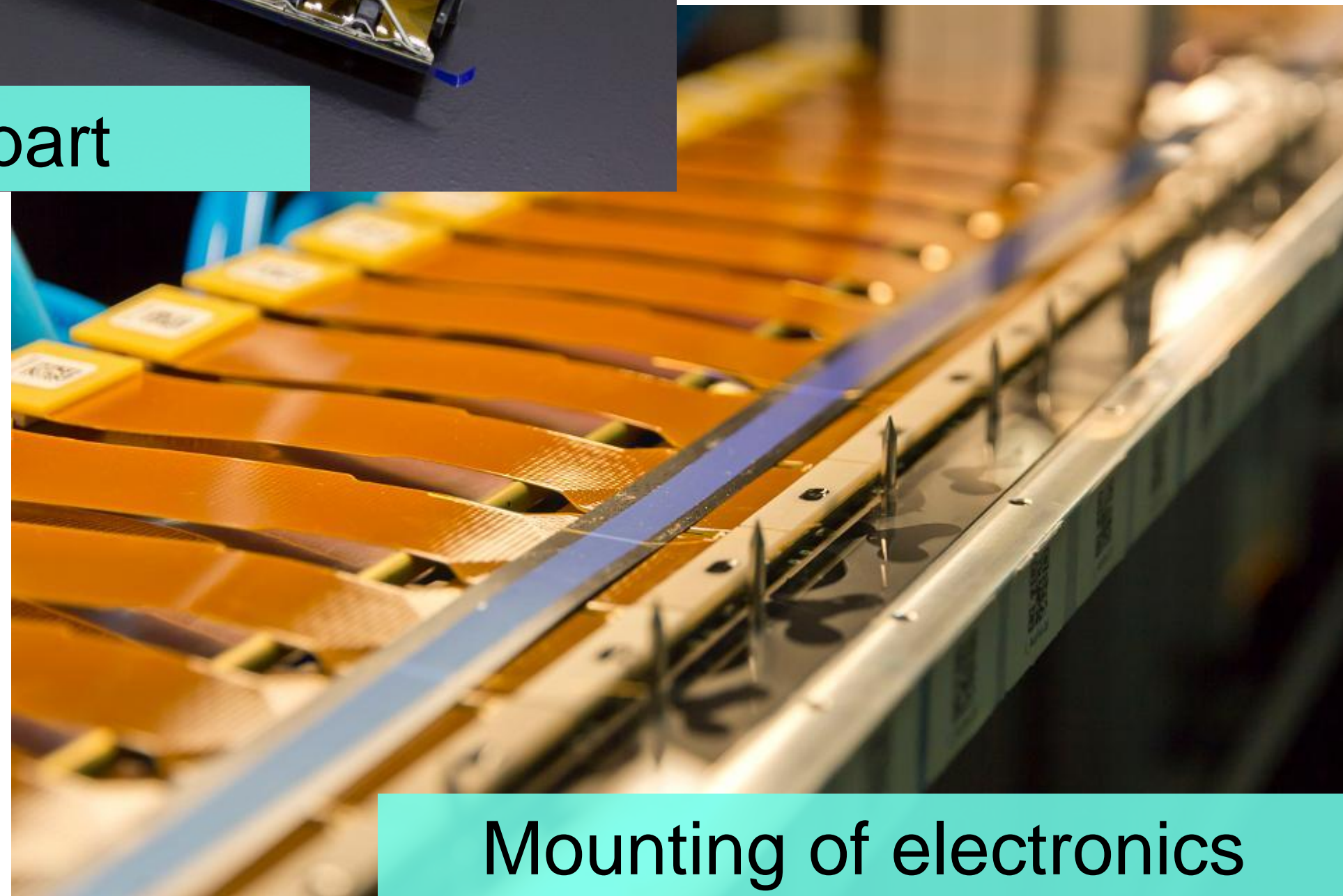


Machining forged Al to 150um Torlon coated

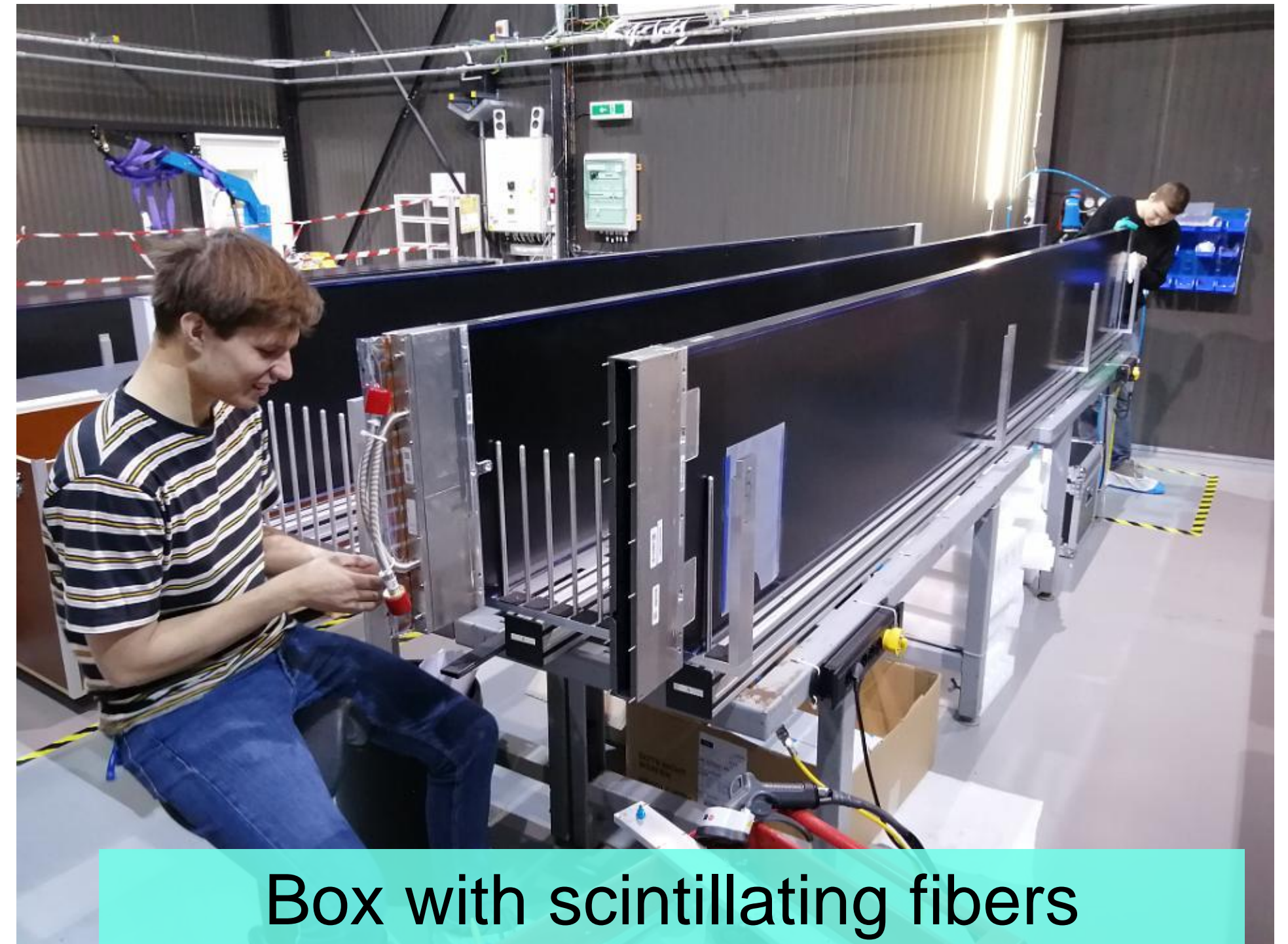
LCHB SCINTILLATING FIBER TRACKER



3D printed to part

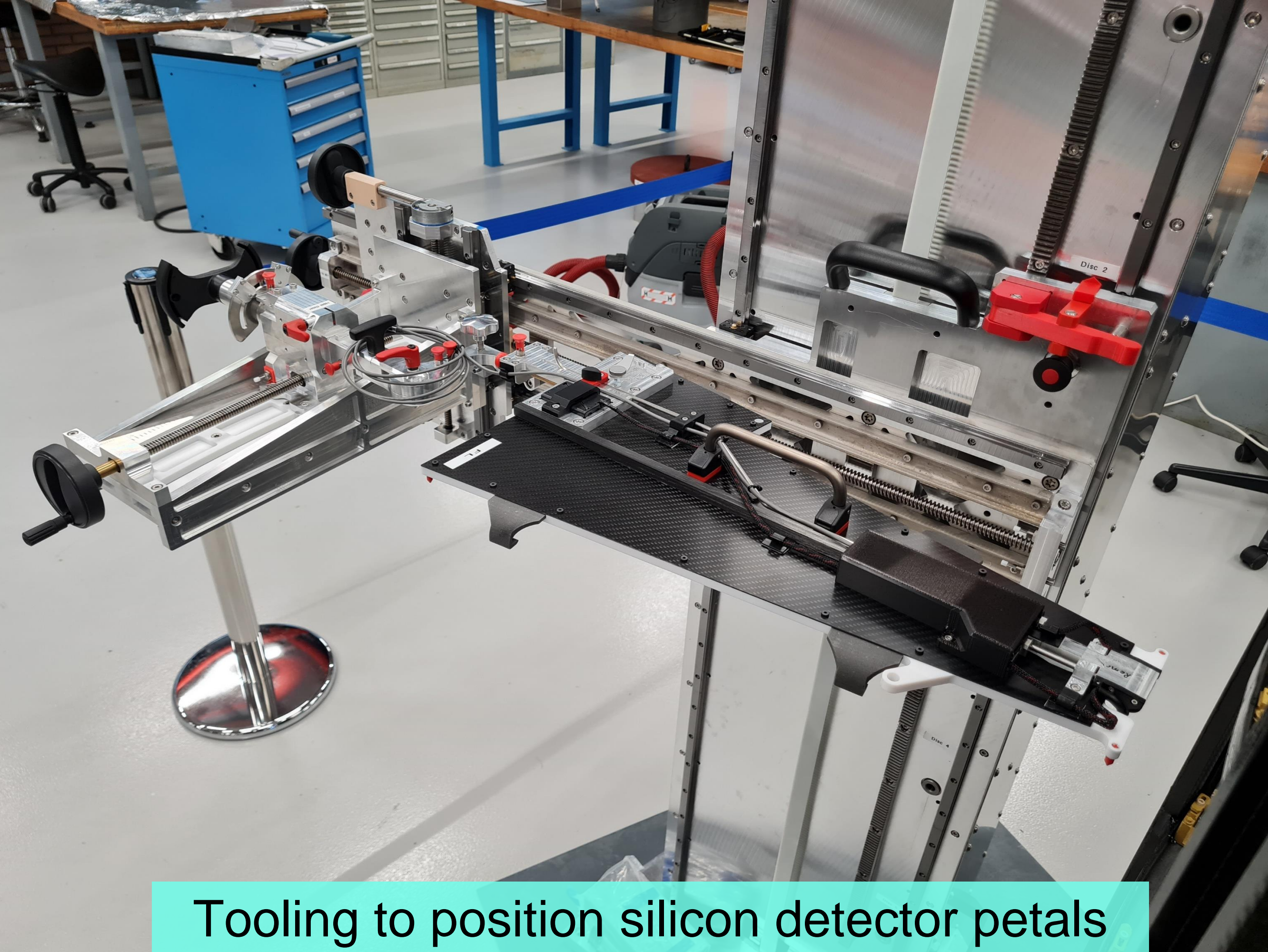
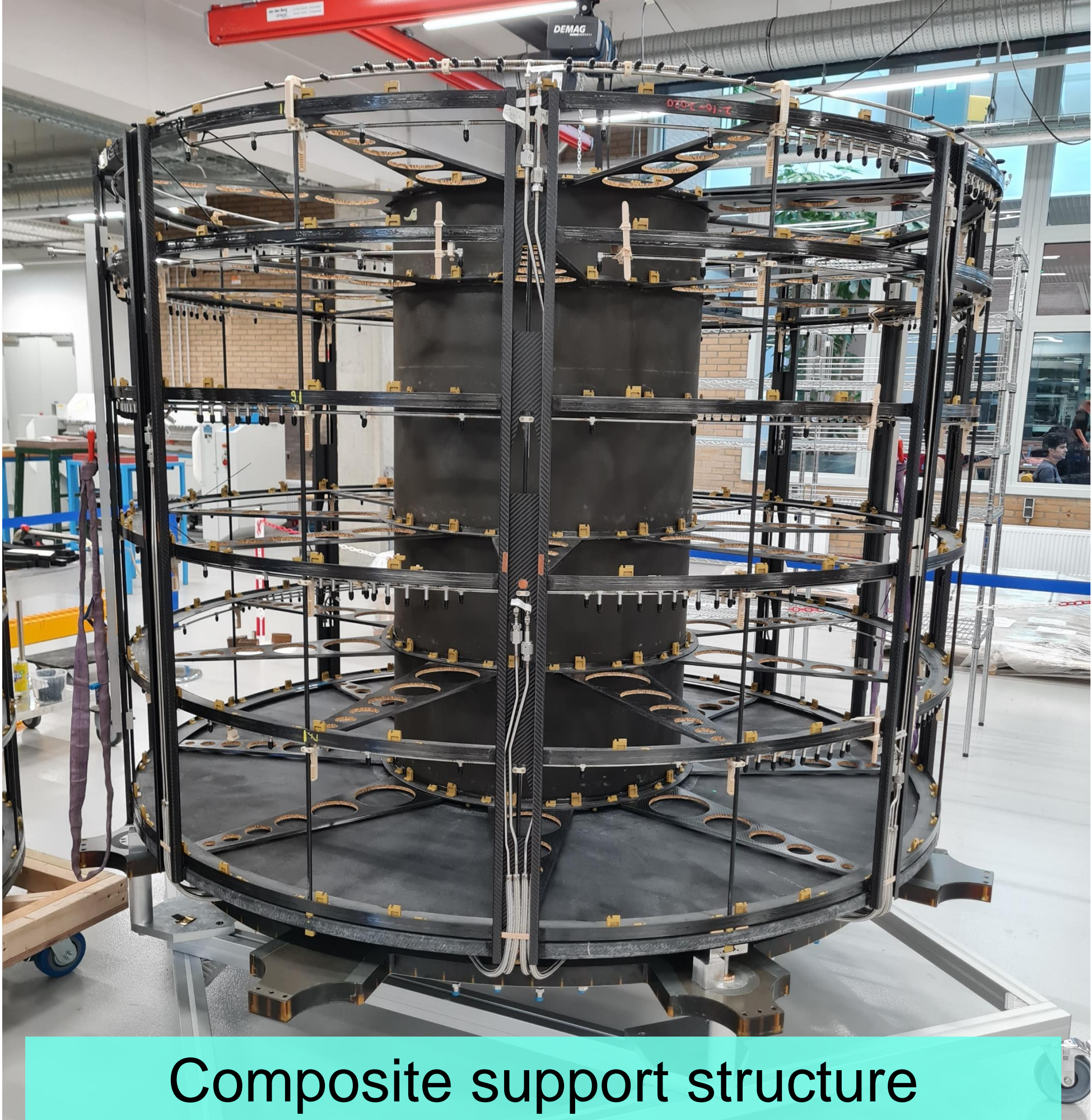


Mounting of electronics

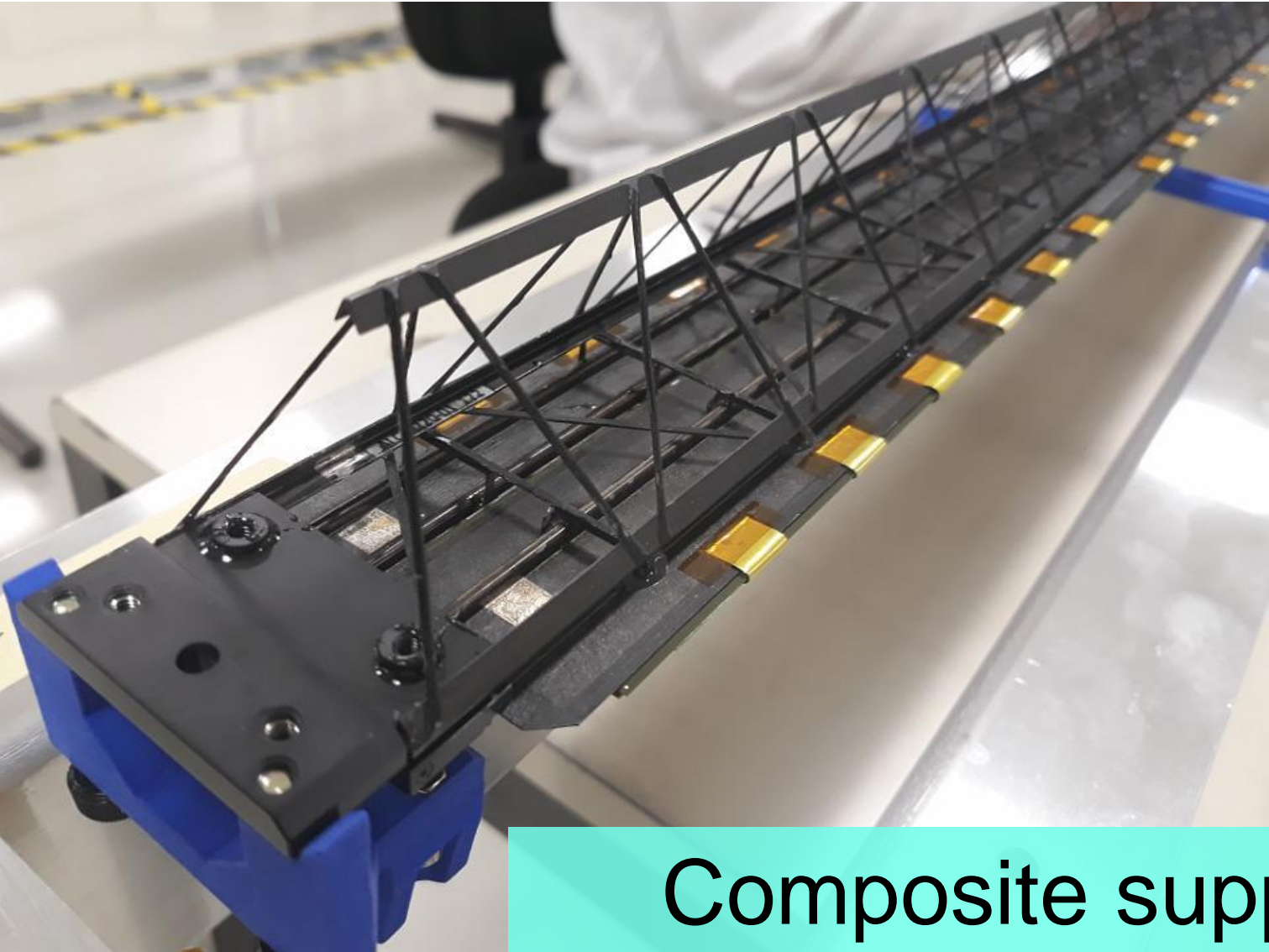


Box with scintillating fibers

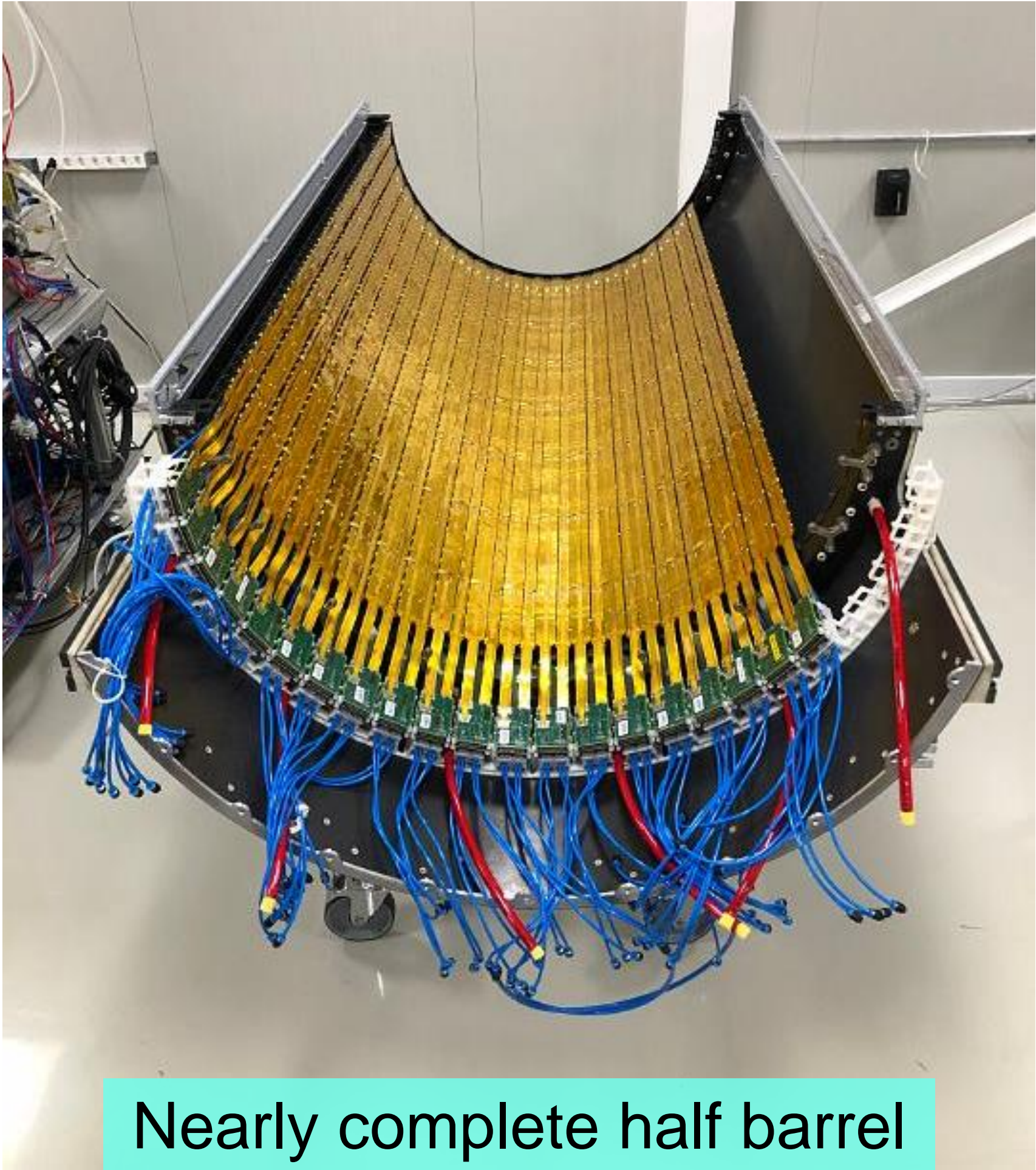
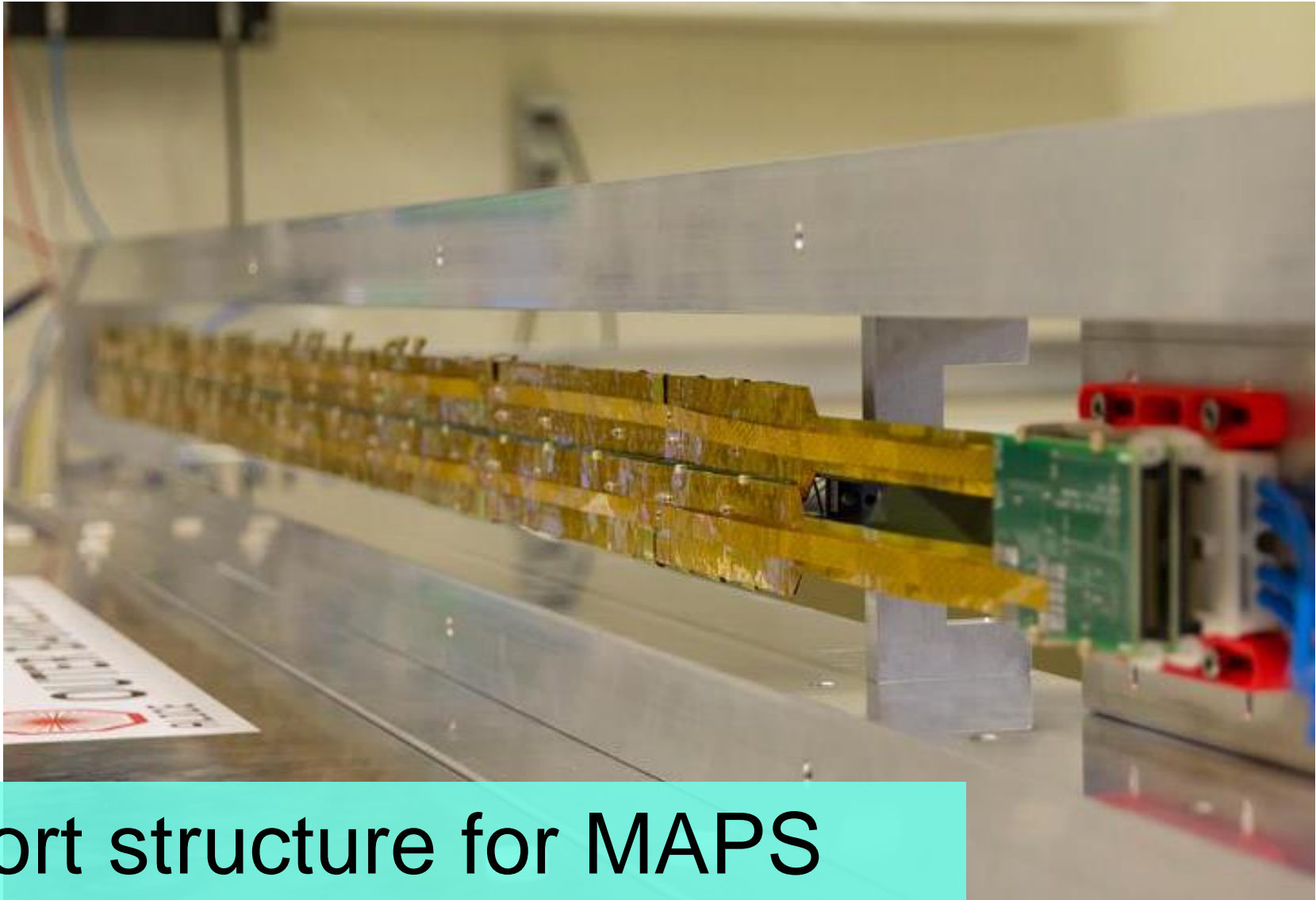
ATLAS INNER TRACKER



ALICE BARREL

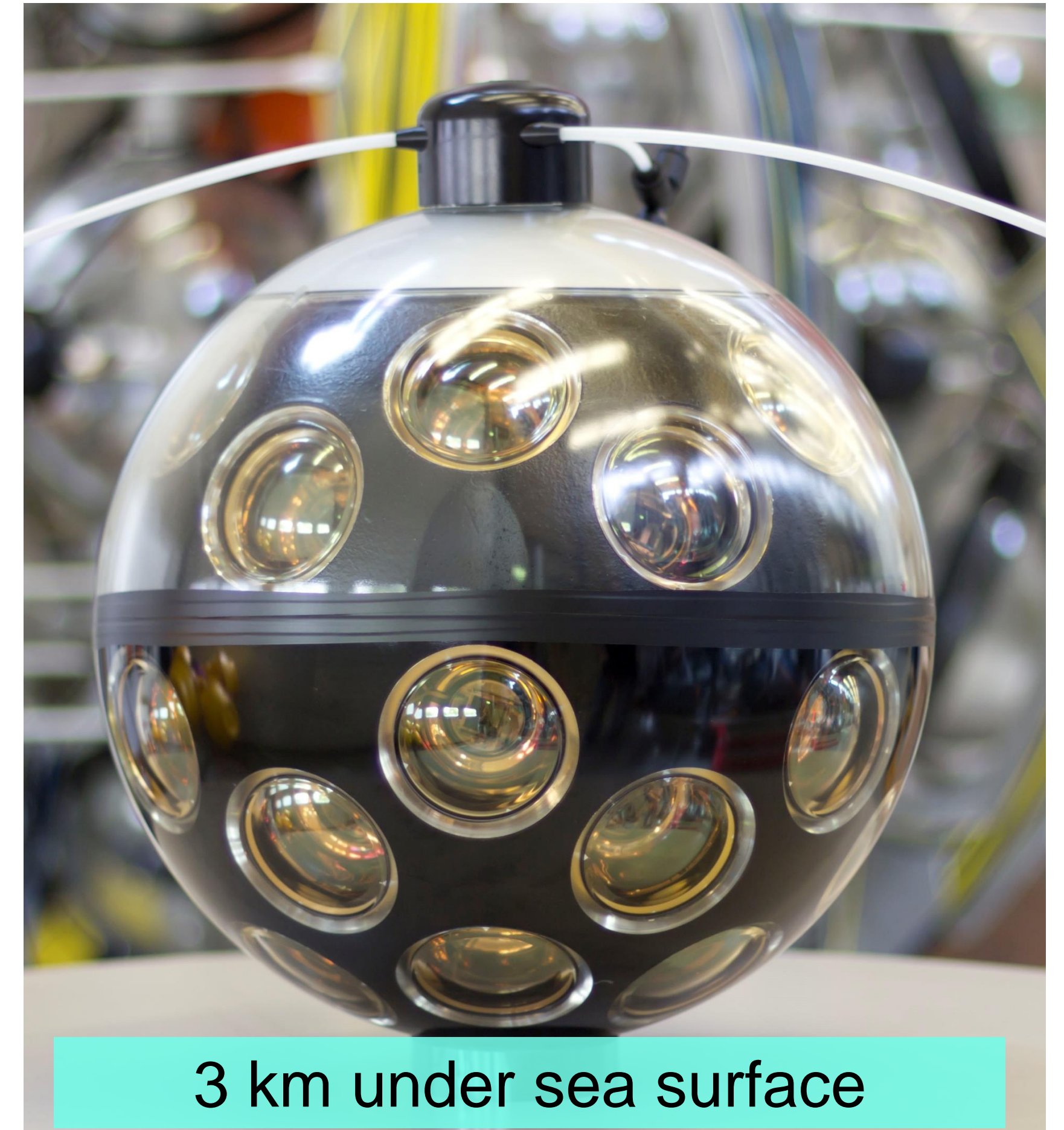
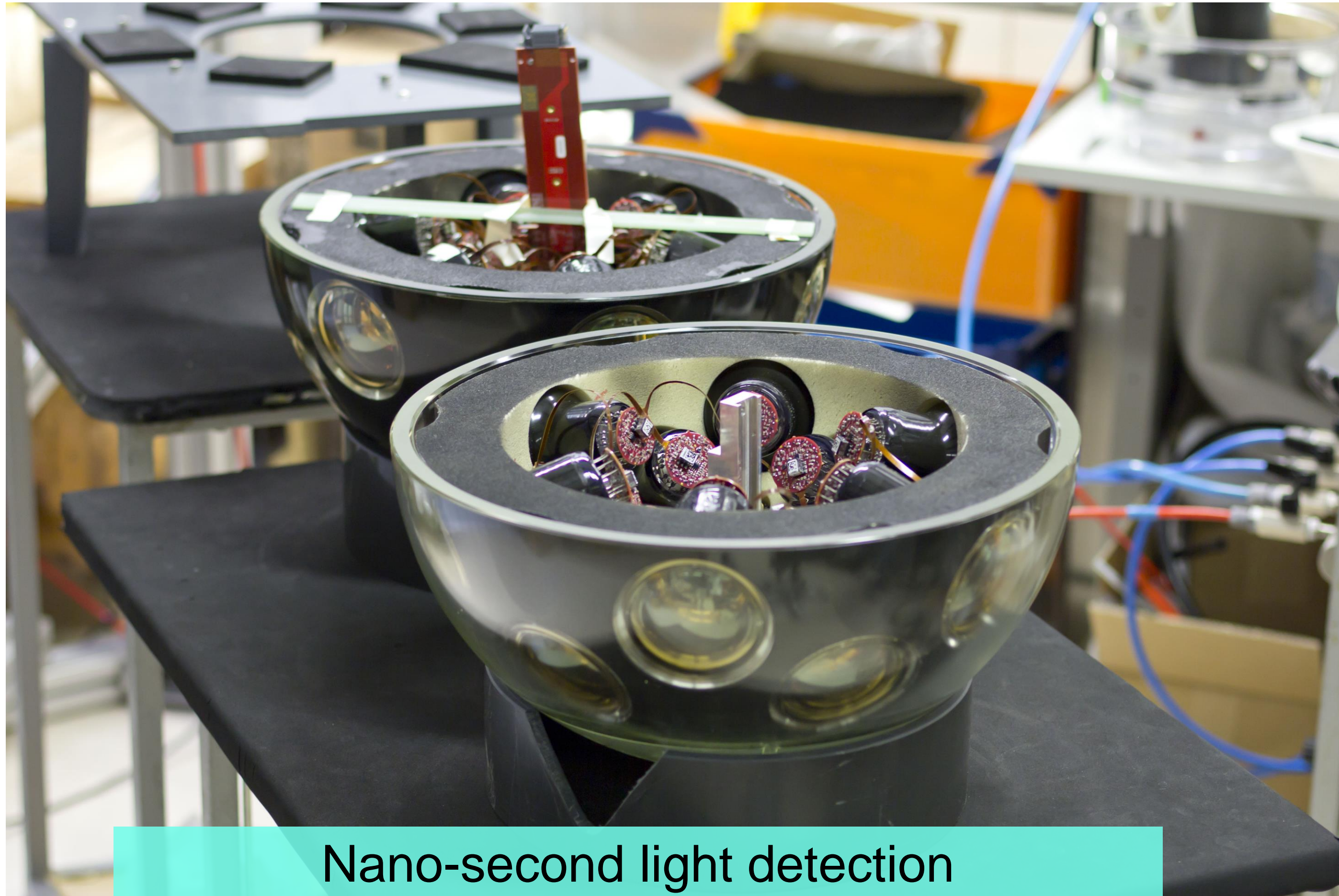


Composite support structure for MAPS



Nearly complete half barrel

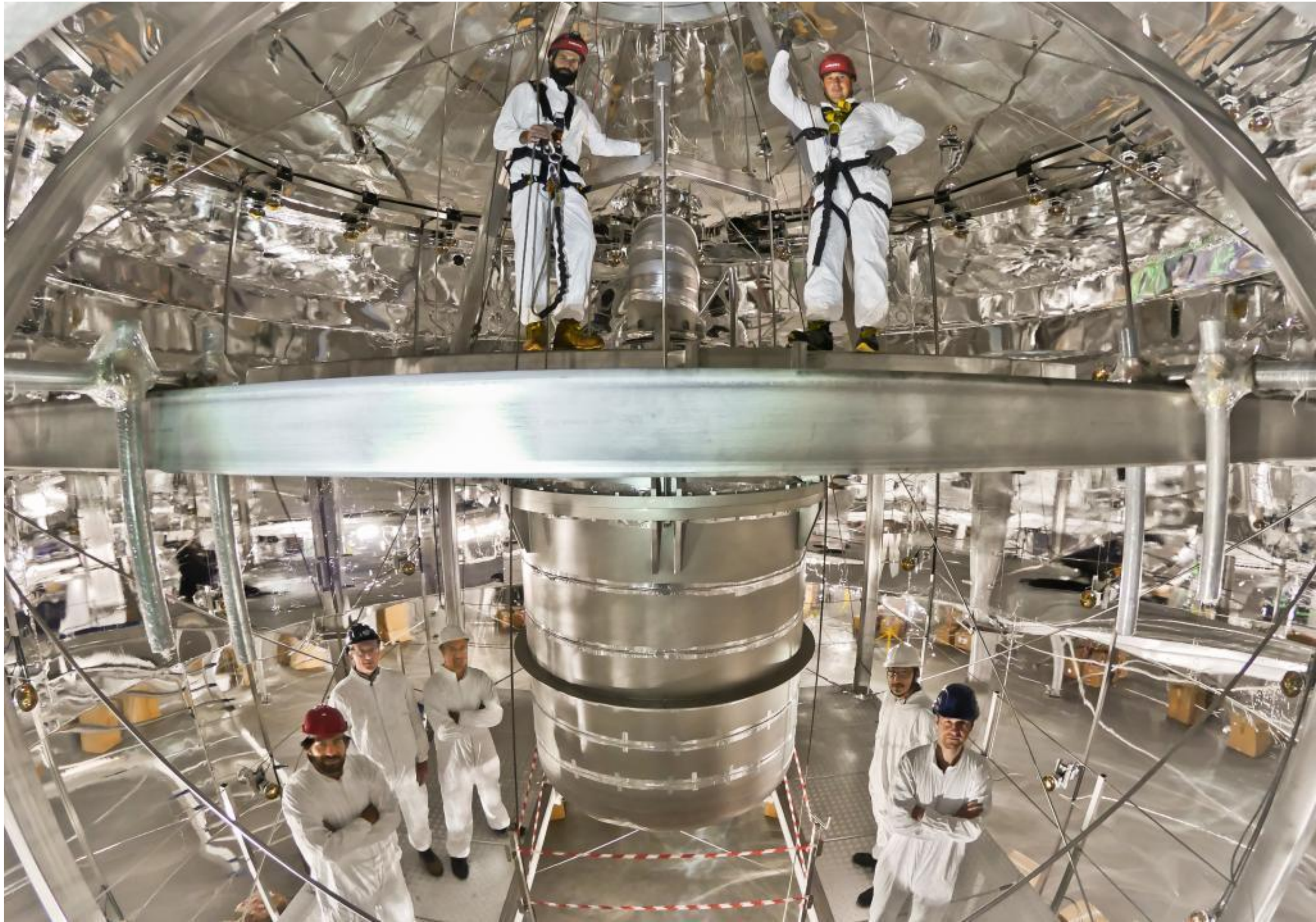
KM3NET DIGITAL OPTICAL MODULES



XENON CRYOSTAT



Ultrapure liquid Xenon with light sensors

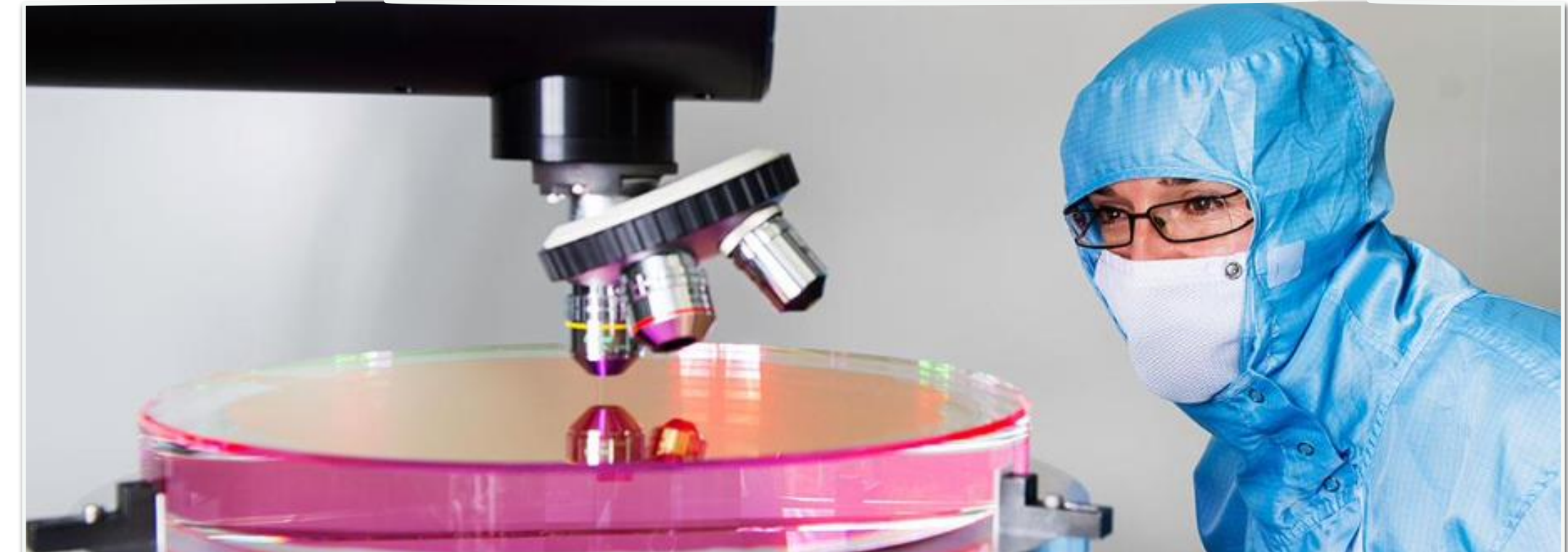


Structure to surround cryostat with water

KEY TECHNOLOGIES EINSTEIN TELESCOPE



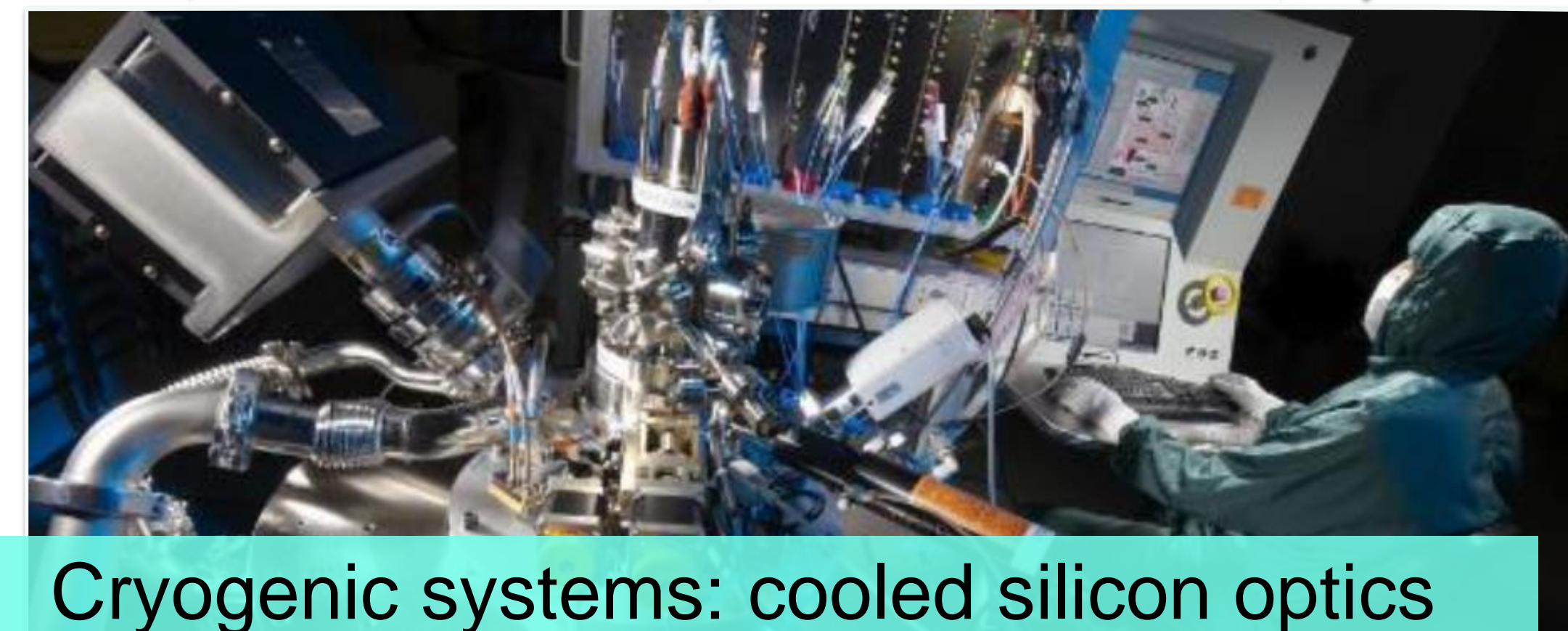
Measuring vibrations: nano-technology



Optics, coatings, semiconductor technology



Vacuum technology: biggest systems worldwide



Cryogenic systems: cooled silicon optics



Enjoy your time at the Ruwenberg to learn and make new friends!