



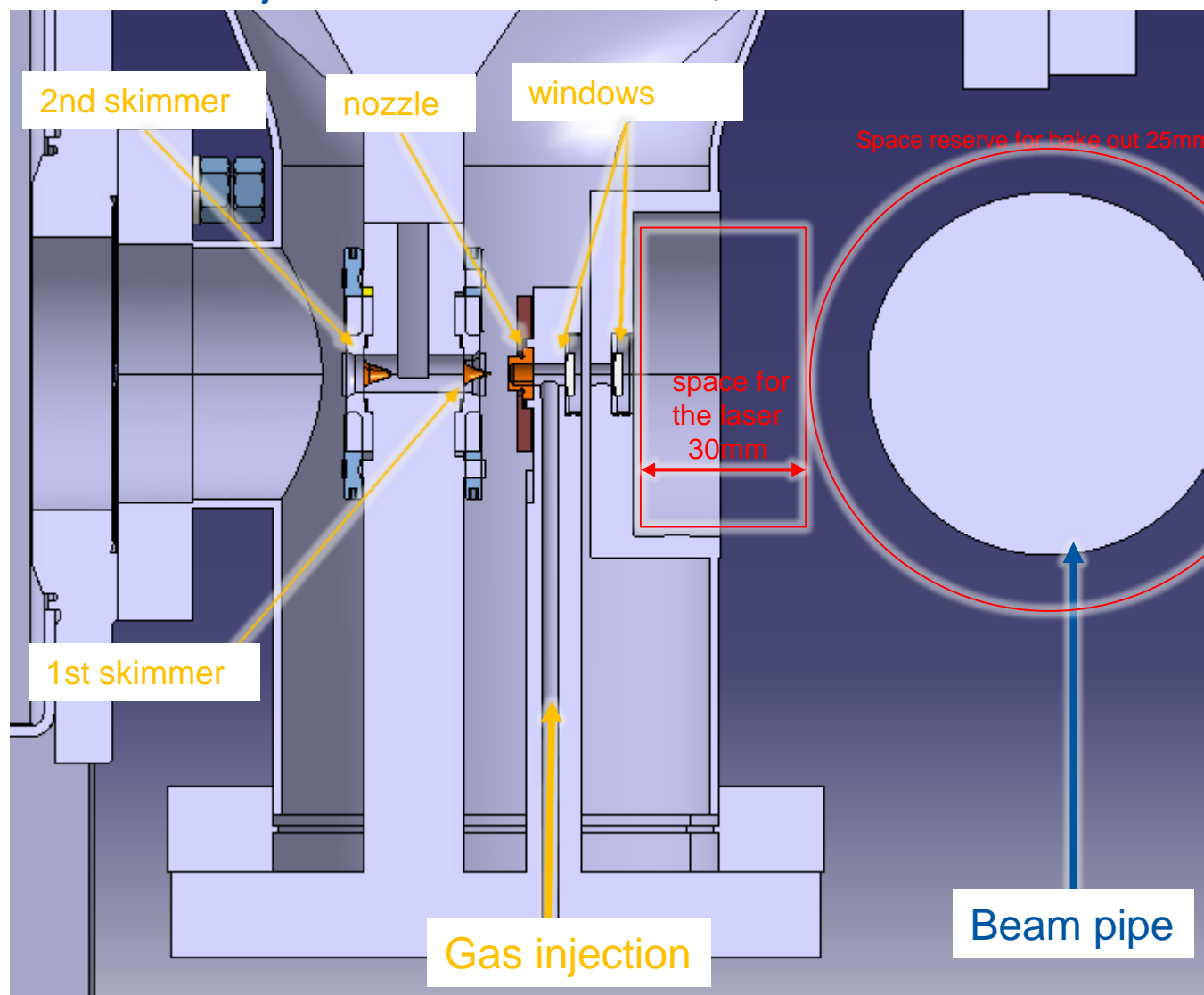
BGC Regular meeting – CERN Updates

Krystian Sidorowski

February 2022, CERN, Geneva, Switzerland

BGC Version 4 - Gas injection chamber

Idea – Gas injection from underneath; 2 windows

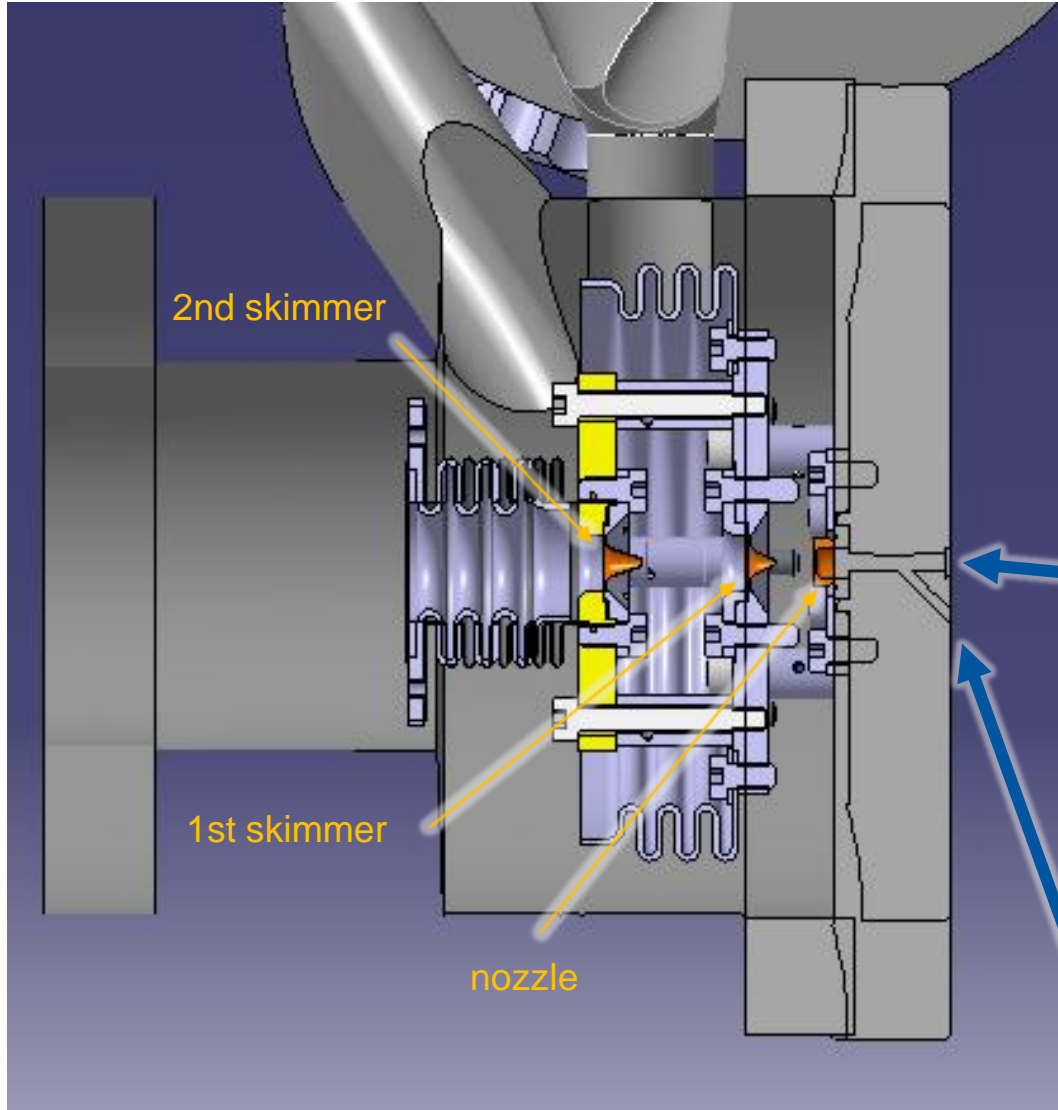


Windows mounted directly on the chamber body → gaining much space for the laser

Next steps:

- finding the right laser on the market
- study the solution with mirror outside the vacuum

BGC Version 4 - Gas injection chamber concept



Skimmers/nozzle assembly from V3 mouted on DN100 flange with the window

Window to shine laser through

Gas injection in the DN100 Flange

BGC Version 4 - Gas injection chamber concept

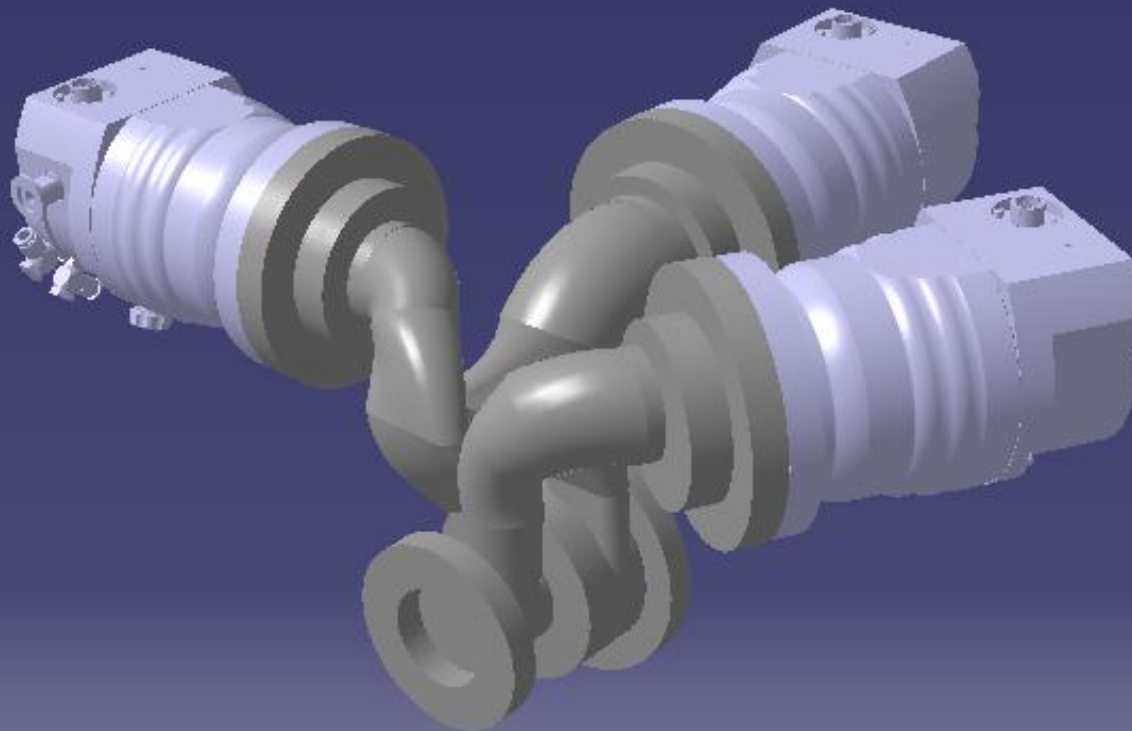
Bended pipes between pumps and chamber similar like in the motorcycle exhaust system.

- + possibility to bend pipes on different angles and directions
- + possibility to use skimmers/nozzle assembly like in V3

- Estimated conductance below 100l/sec – diameters need to be increased



Motorcycle exhaust system

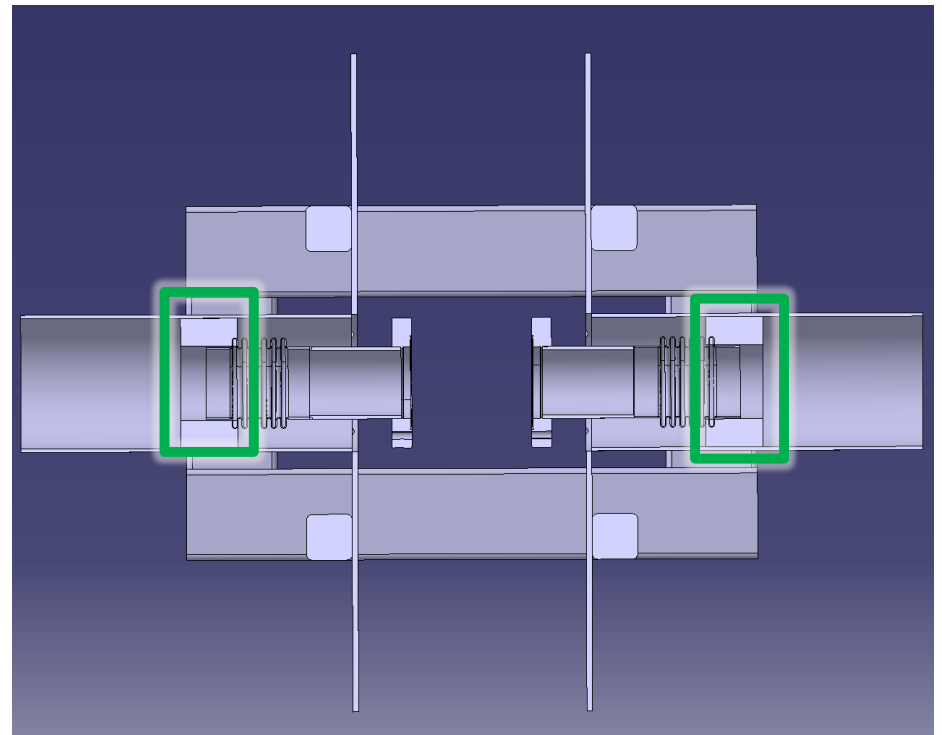


BGC Version 4 MockUp

Bellows mock-up simulations

To integrate BGC we need to make the bellows mock-up

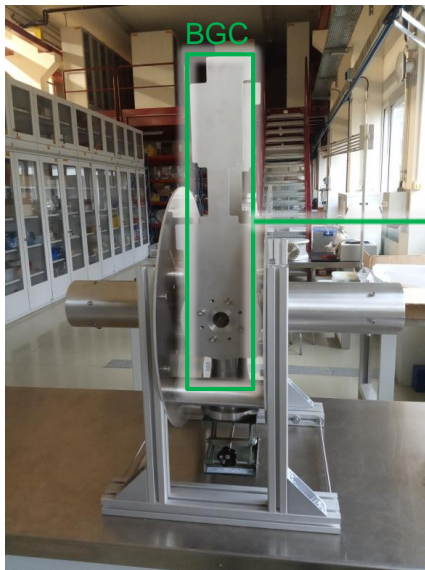
The installation of the sleeves allows for the simulation of bellows



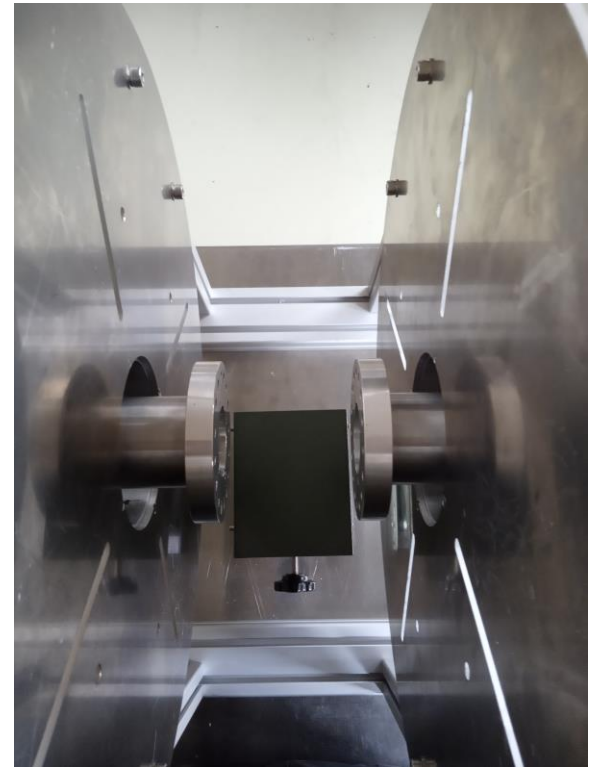
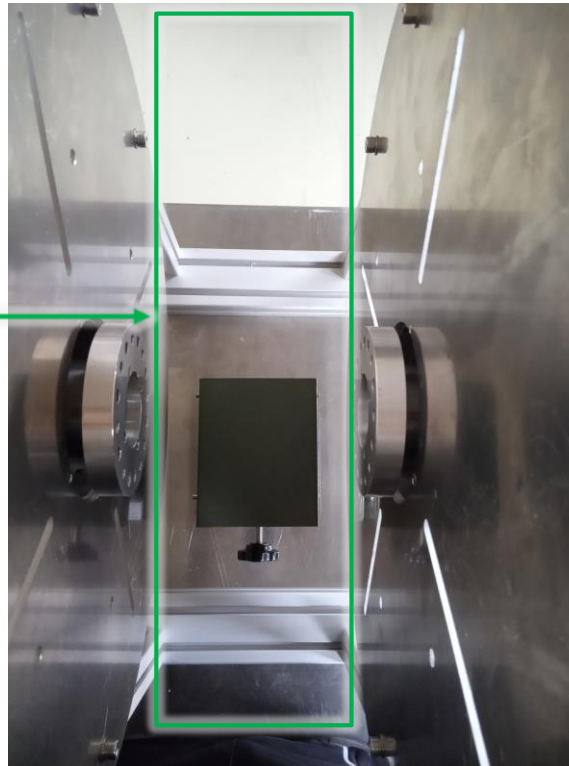
BGC Version 4 MockUp

Bellows mock-up
simulations

Posibility to move HEL chambers which allows to install BGC inbetween



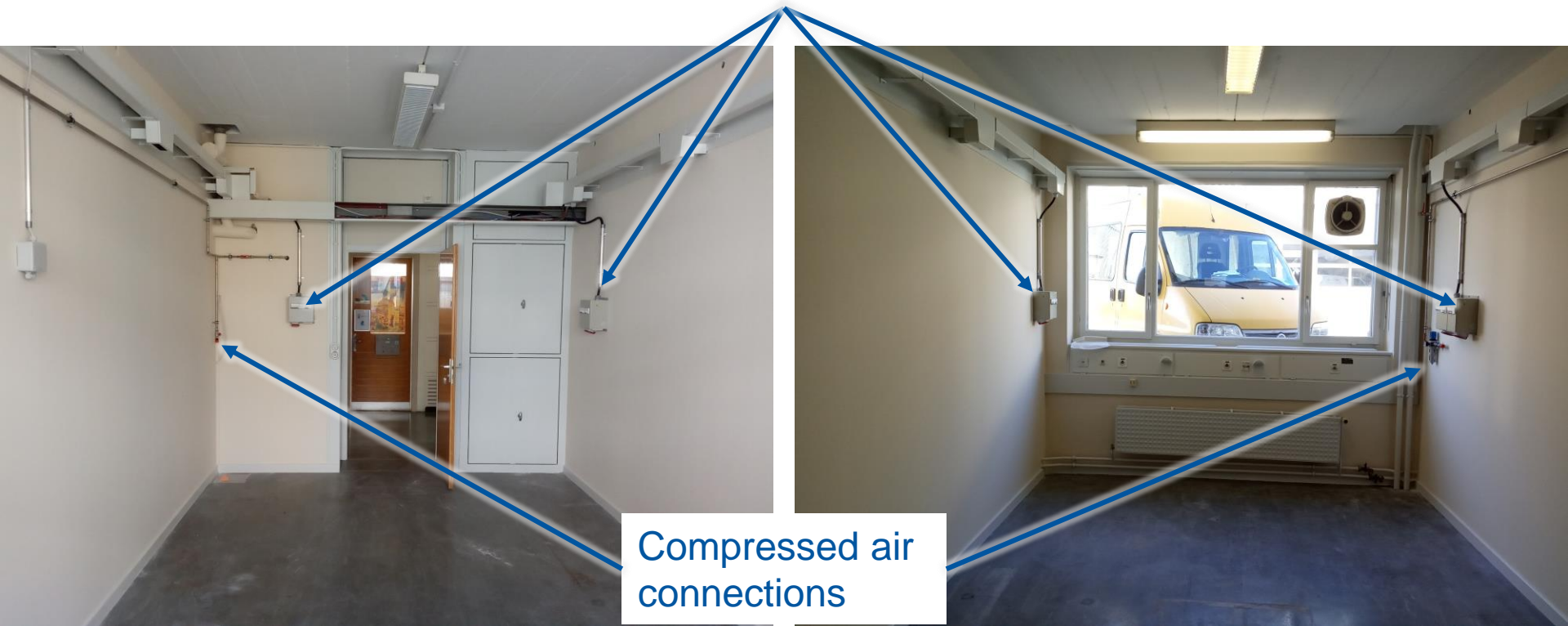
Whole MockUp



Lab 8-R-014 UpDate

- Renovation of the walls is done
- Compressed air connections are installed
- Furniture - should be delivered week 13 (end of March)
- Power plugs are installed , **ready to use?**

Power plugs



Compressed air connections

Are there any questions?