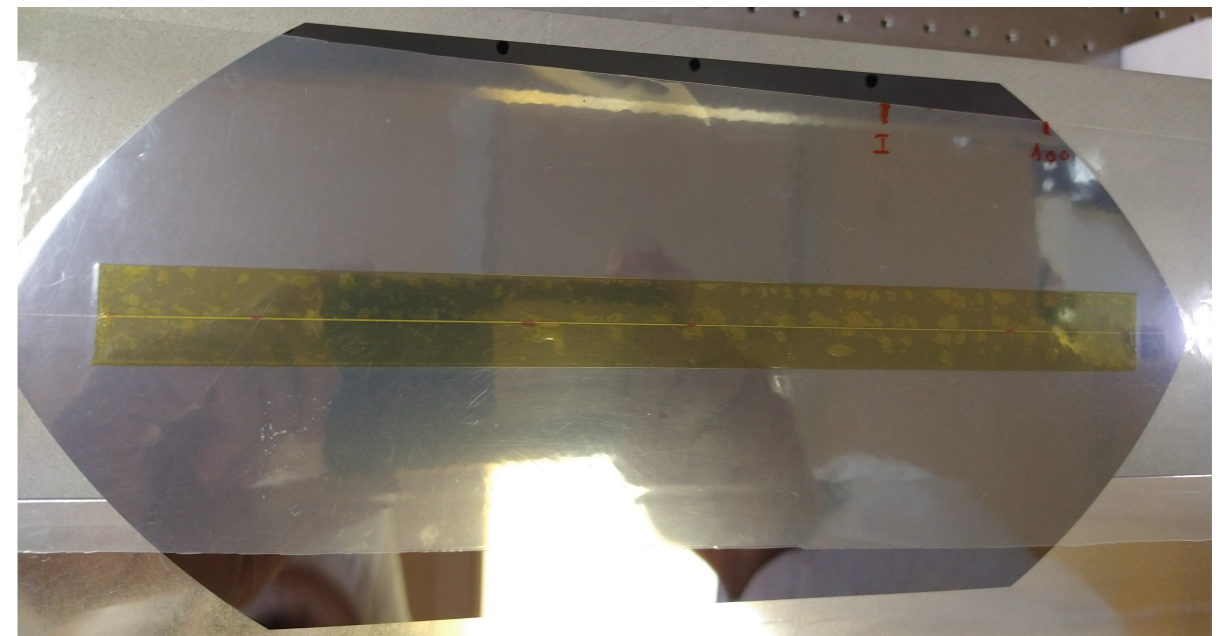
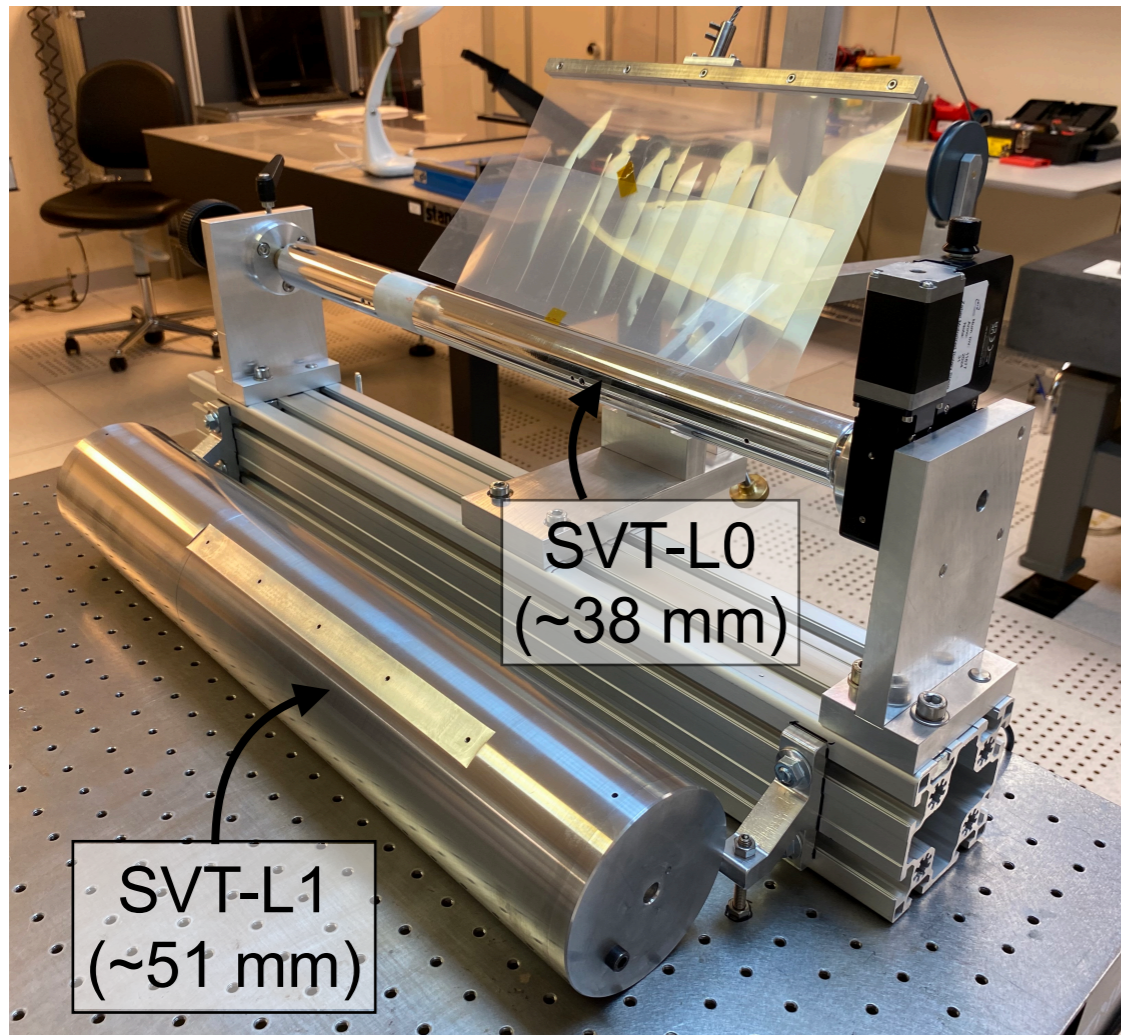


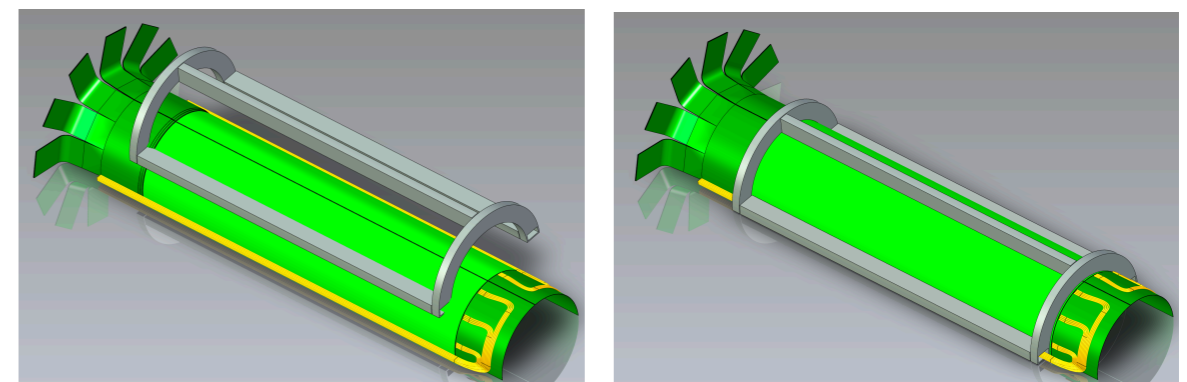
**SVT-IB**

- mandrels, produced in our workshop, at the two radii (SVT-L0 and SVT-L1) → AVAILABLE
- bending/bonding tool (with rotary motor) → AVAILABLE
- extended vacuum tools for sensor handling (common with ITS3) → will be updated using porous aluminium just purchased

- Quite successful first attempt of alignment and connection of two L0-sensor to cover the full SVT-L0 half-layer



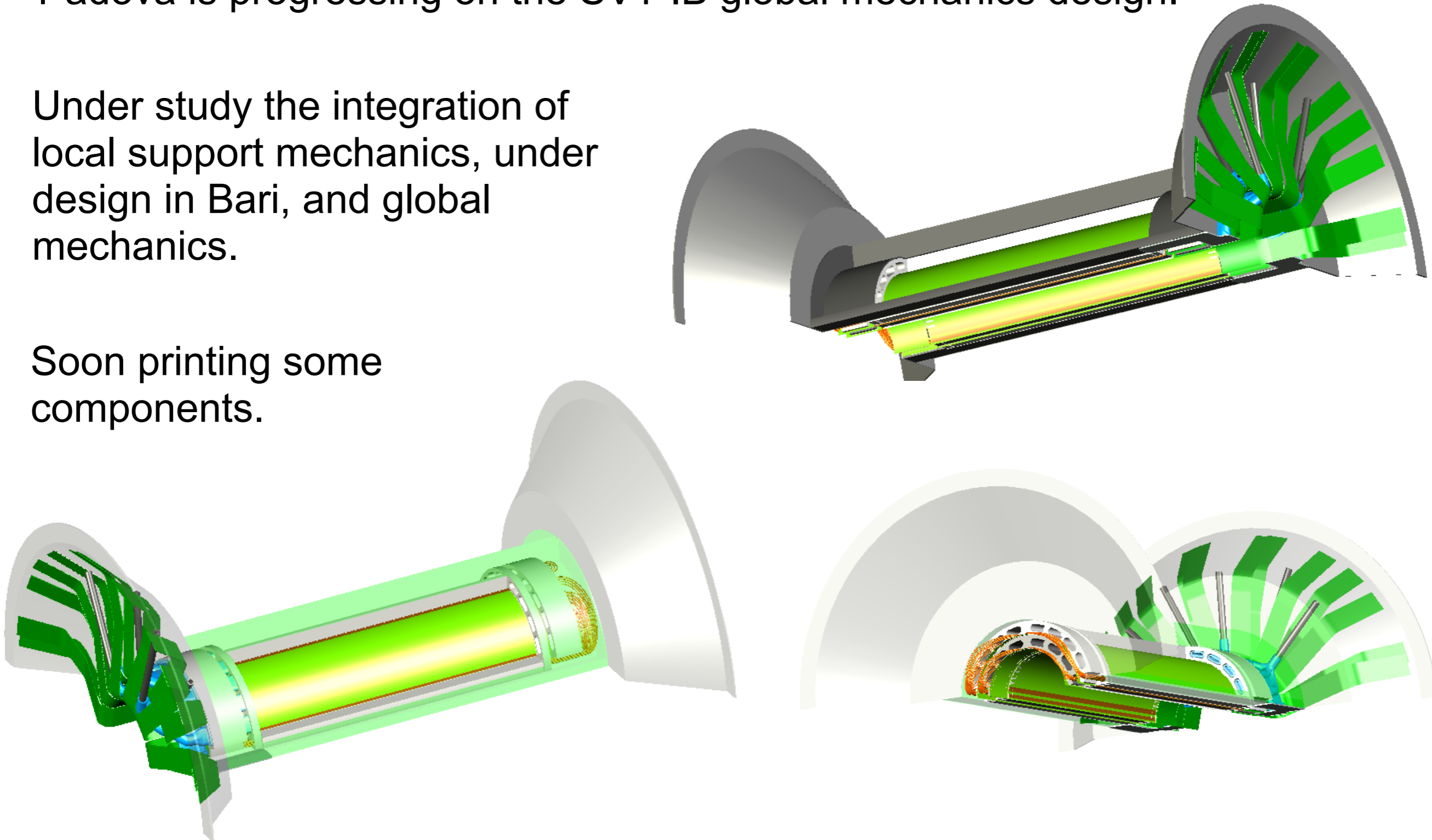
- SVT-L1 local support structures already printed
- SVT-L0 under printing



Padova is progressing on the SVT-IB global mechanics design.

Under study the integration of local support mechanics, under design in Bari, and global mechanics.

Soon printing some components.



## Prototype assembly campaign 2024-2025

Prototype	Components	Goal
IBL01_P1 (half-layer)	<ul style="list-style-type: none"> <li>2 naked silicon L1 sensors</li> <li>L1 local support structure (3-D printed)</li> <li>outer support shell (machined in PEEK)</li> </ul>	<ul style="list-style-type: none"> <li>finalize half-layer assembly procedure</li> </ul>
IBL01_P2 (half-barrel)	<ul style="list-style-type: none"> <li>IBL01_P1 +</li> <li>2 naked silicon L0 sensors</li> <li>L0 local support structure (3-D printed)</li> </ul>	<ul style="list-style-type: none"> <li>finalize half-barrel assembly procedure</li> </ul>
IBL01_P3 (half-layer)	<ul style="list-style-type: none"> <li>2 naked silicon L1 sensors</li> <li>L1 local support structure (carbon foam)</li> <li>outer support shell (carbon fiber, to be defined)</li> </ul>	<ul style="list-style-type: none"> <li>thermal chamber test</li> </ul>
IBL01_P4 (half-barrel)	<ul style="list-style-type: none"> <li>IBL01_P3 +</li> <li>2 naked silicon L0 sensors</li> <li>L0 local support structure (carbon foam)</li> </ul>	<ul style="list-style-type: none"> <li>thermal chamber test</li> </ul>
IBL01_P5 (half-barrel)	<ul style="list-style-type: none"> <li>2+2 silicon L0+L1 <b>sensors with heaters from CERN</b></li> <li>L0+L1 local support structures (carbon foam)</li> <li>outer support shell (carbon fiber, to be defined)</li> <li><b>air distribution inlet et outlet</b> (to be designed)</li> <li>PT1000 sensors (to be glued on heater surface)</li> </ul>	<ul style="list-style-type: none"> <li>wind tunnel test</li> </ul>