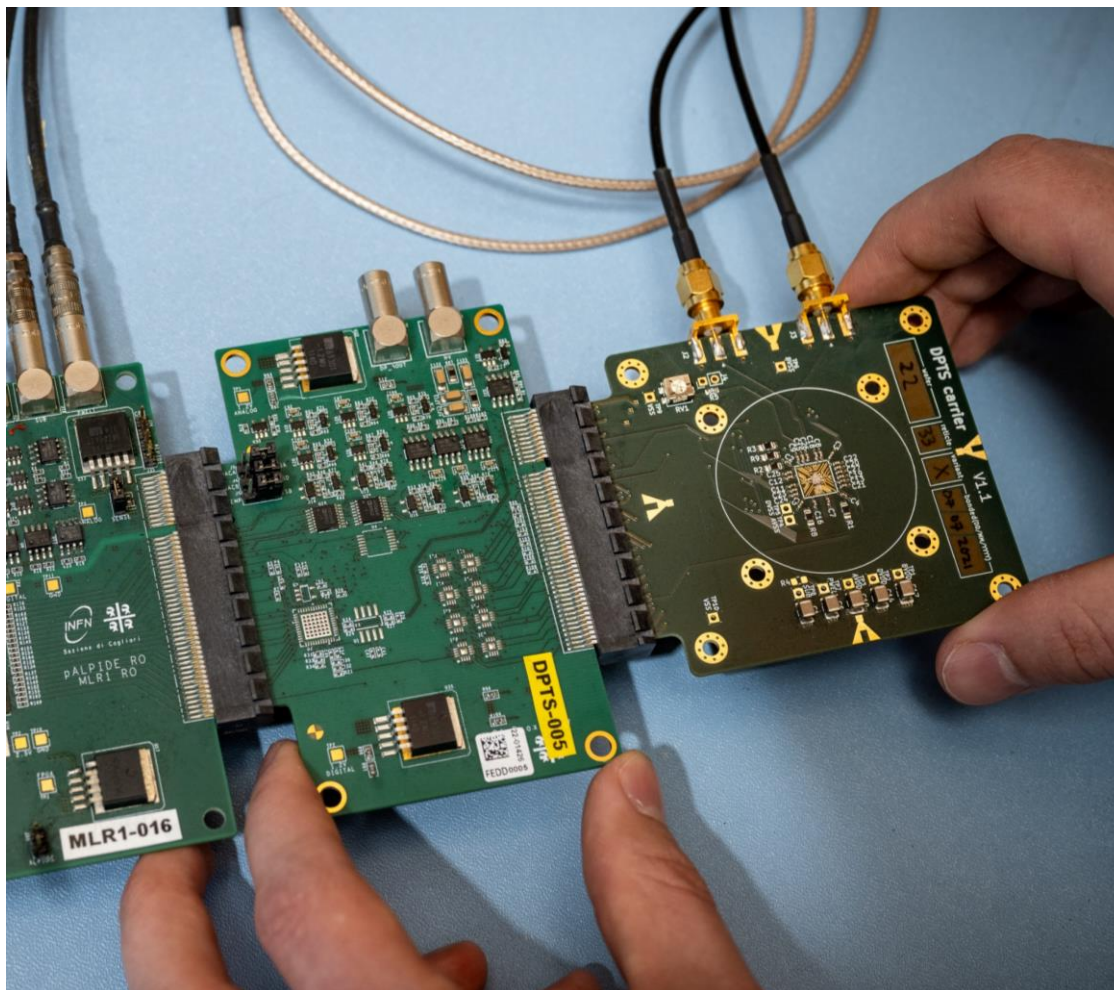


Constructing the ePIC Inner Barrel from sensor units

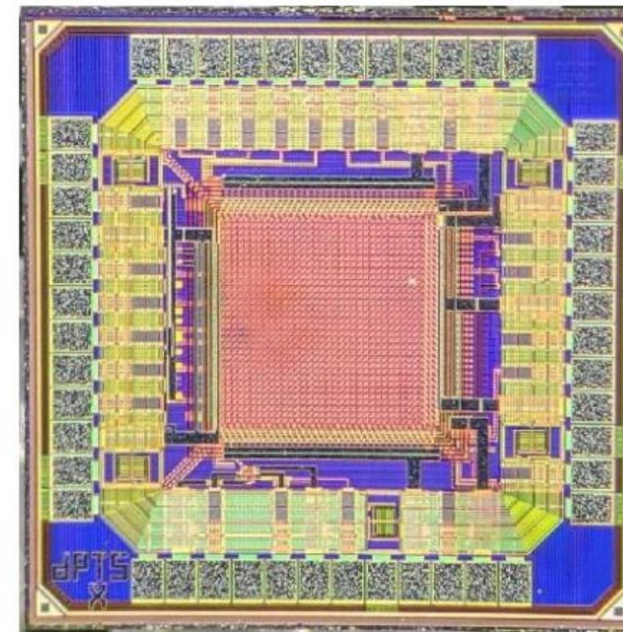
Prototypes



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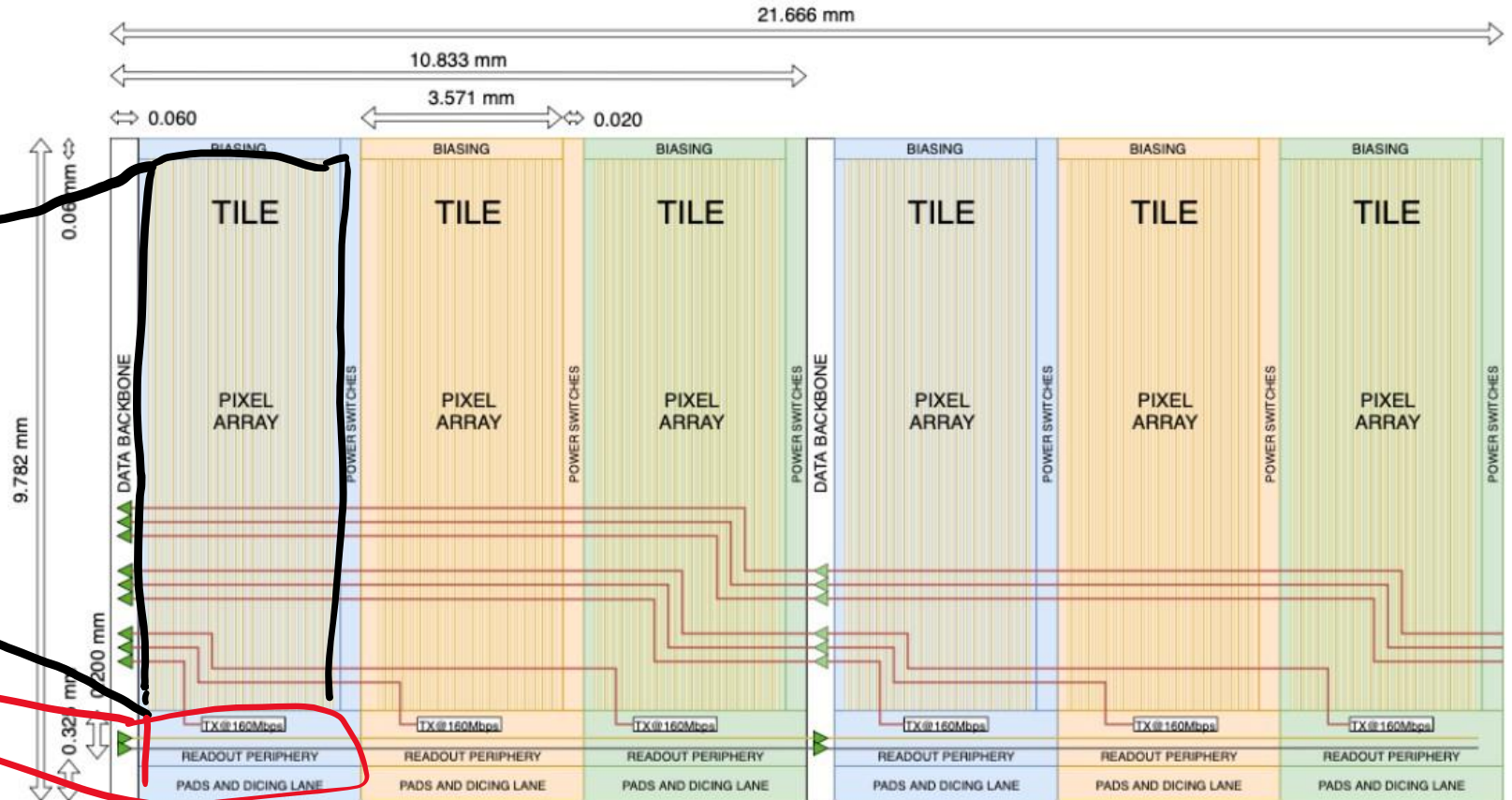
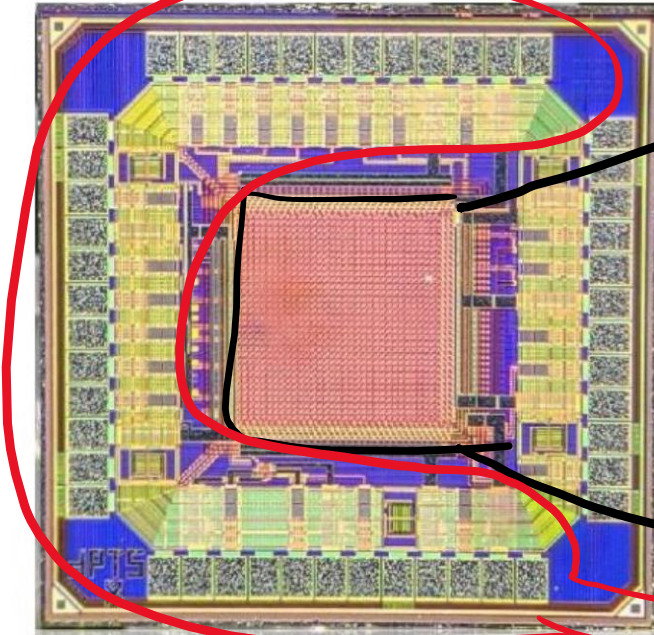


Digital Pixel Test Structure (DPTS)

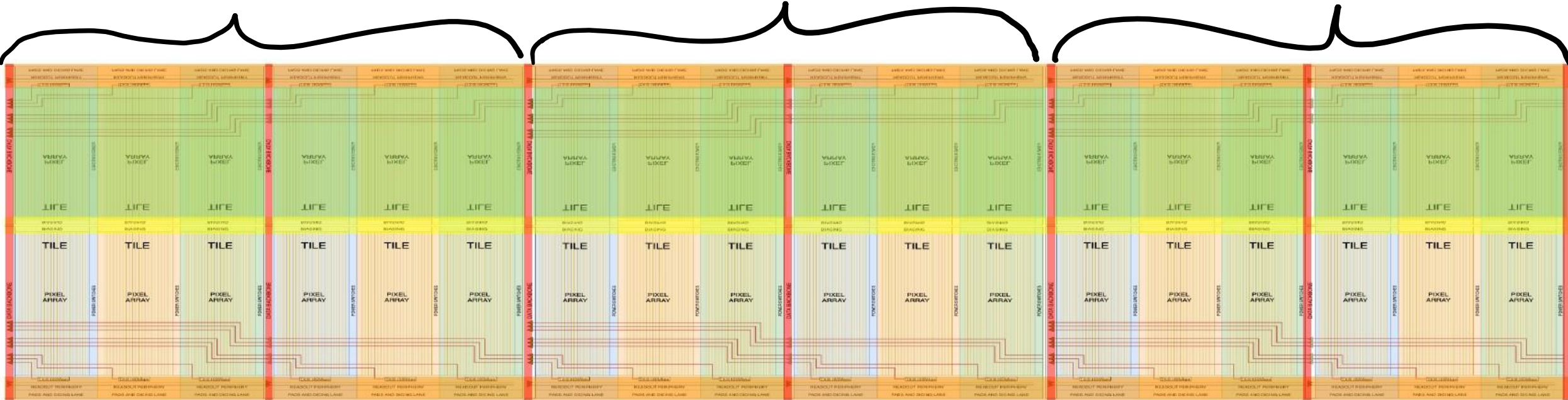




Digital Pixel Test Structure (DPTS)



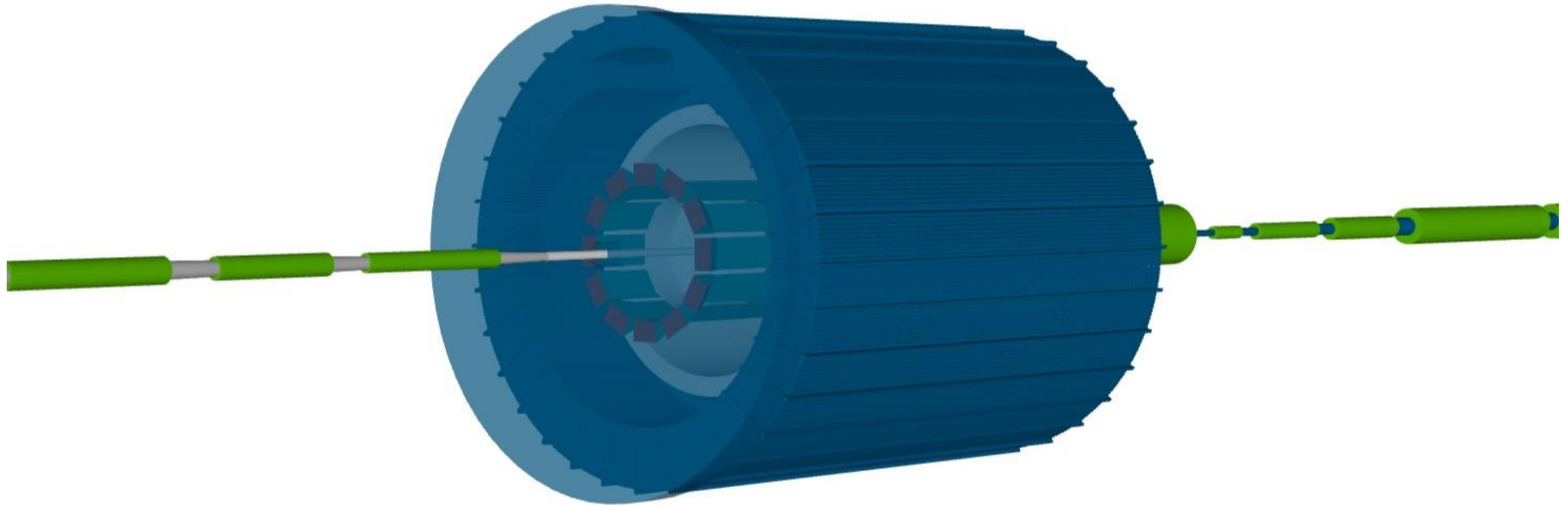
Repeated sensor unit



ePIC Detector



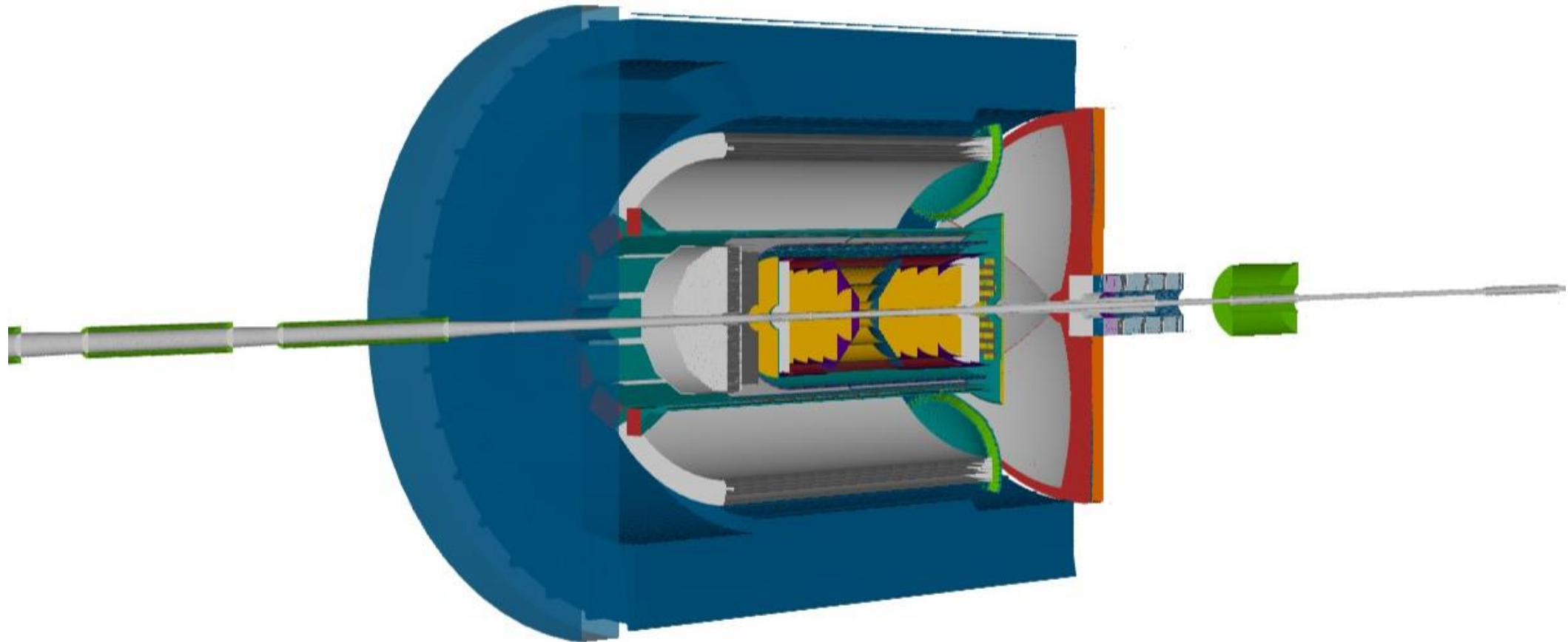
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ePIC Detector



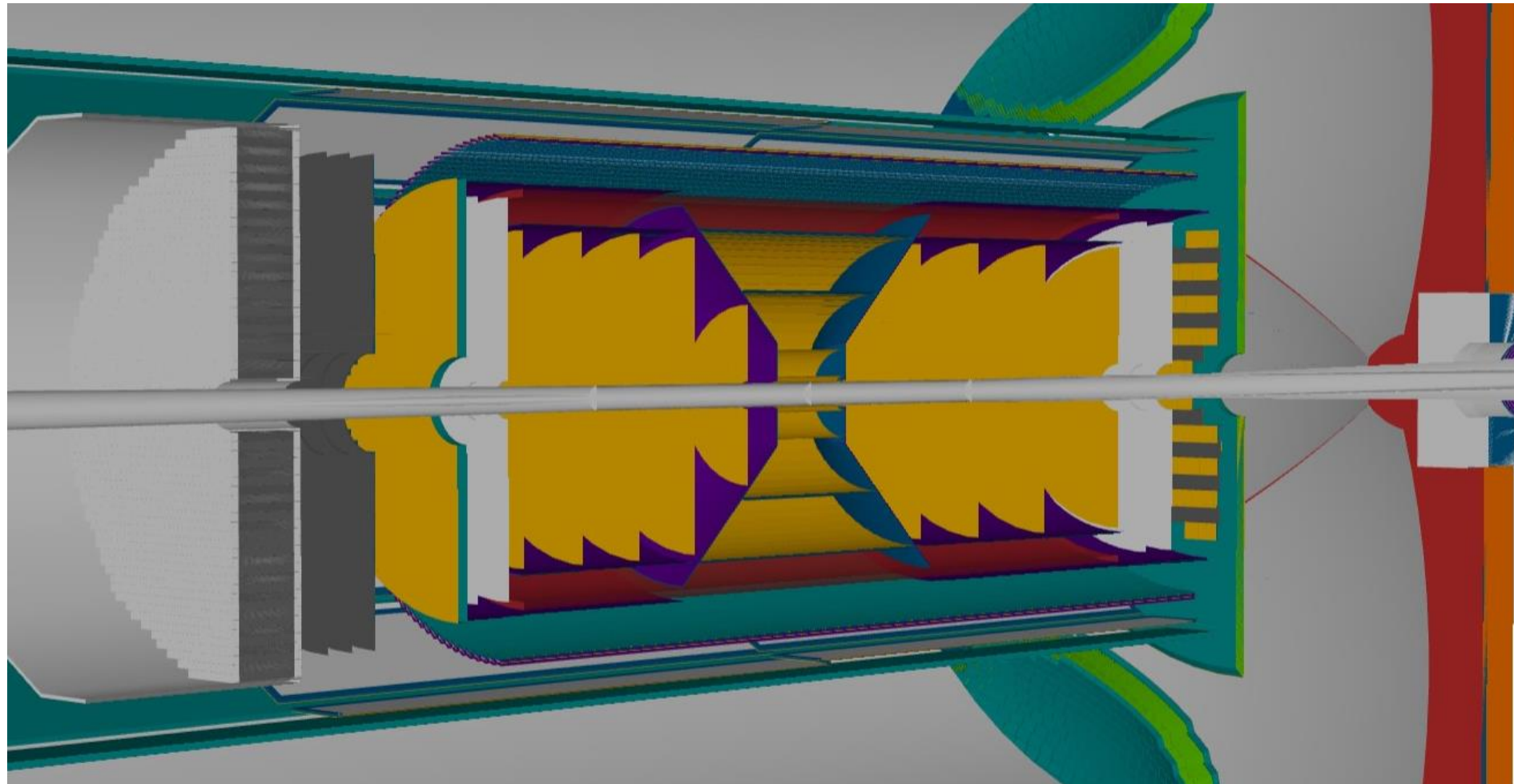
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ePIC Silicon Tracker SVT



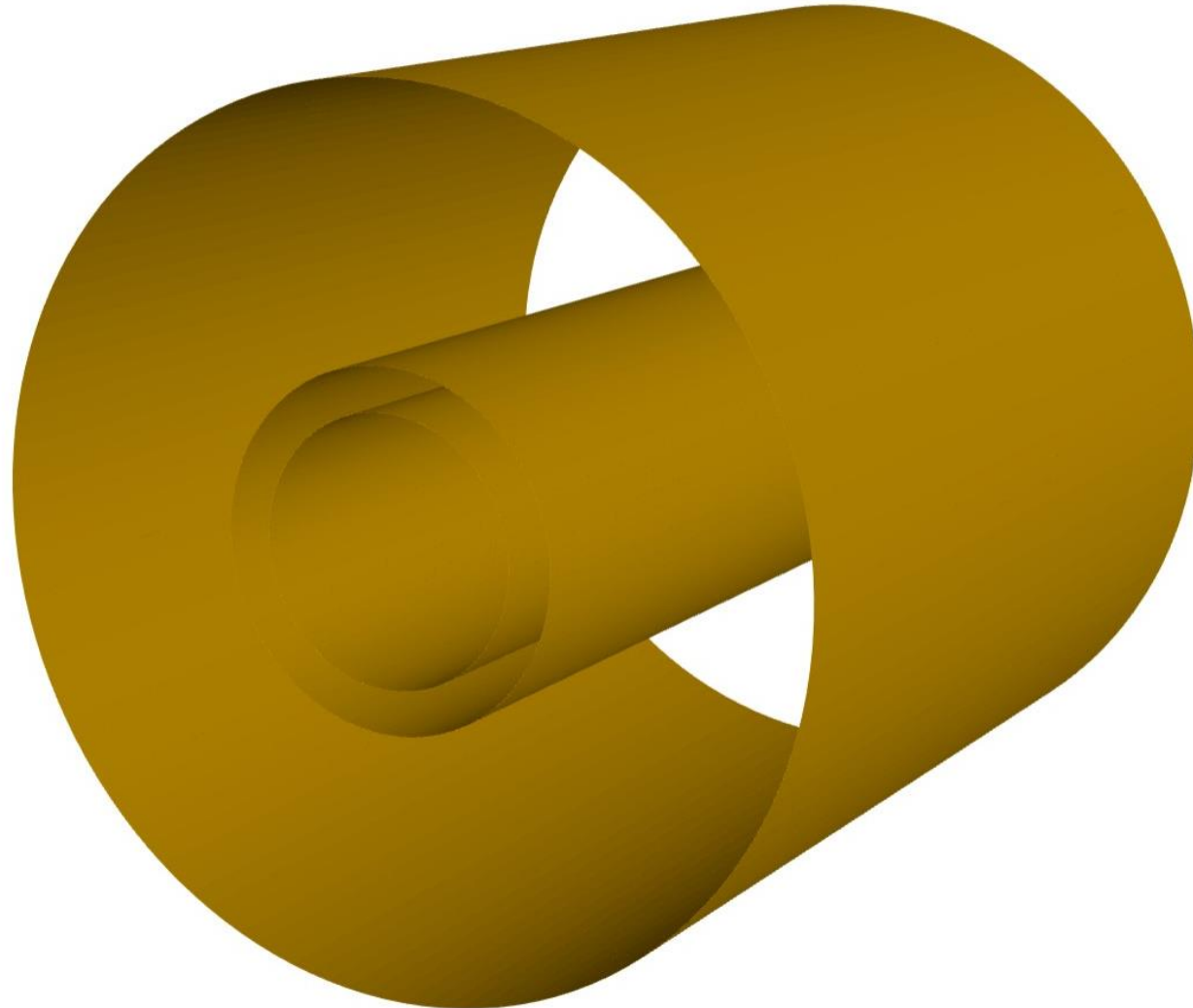
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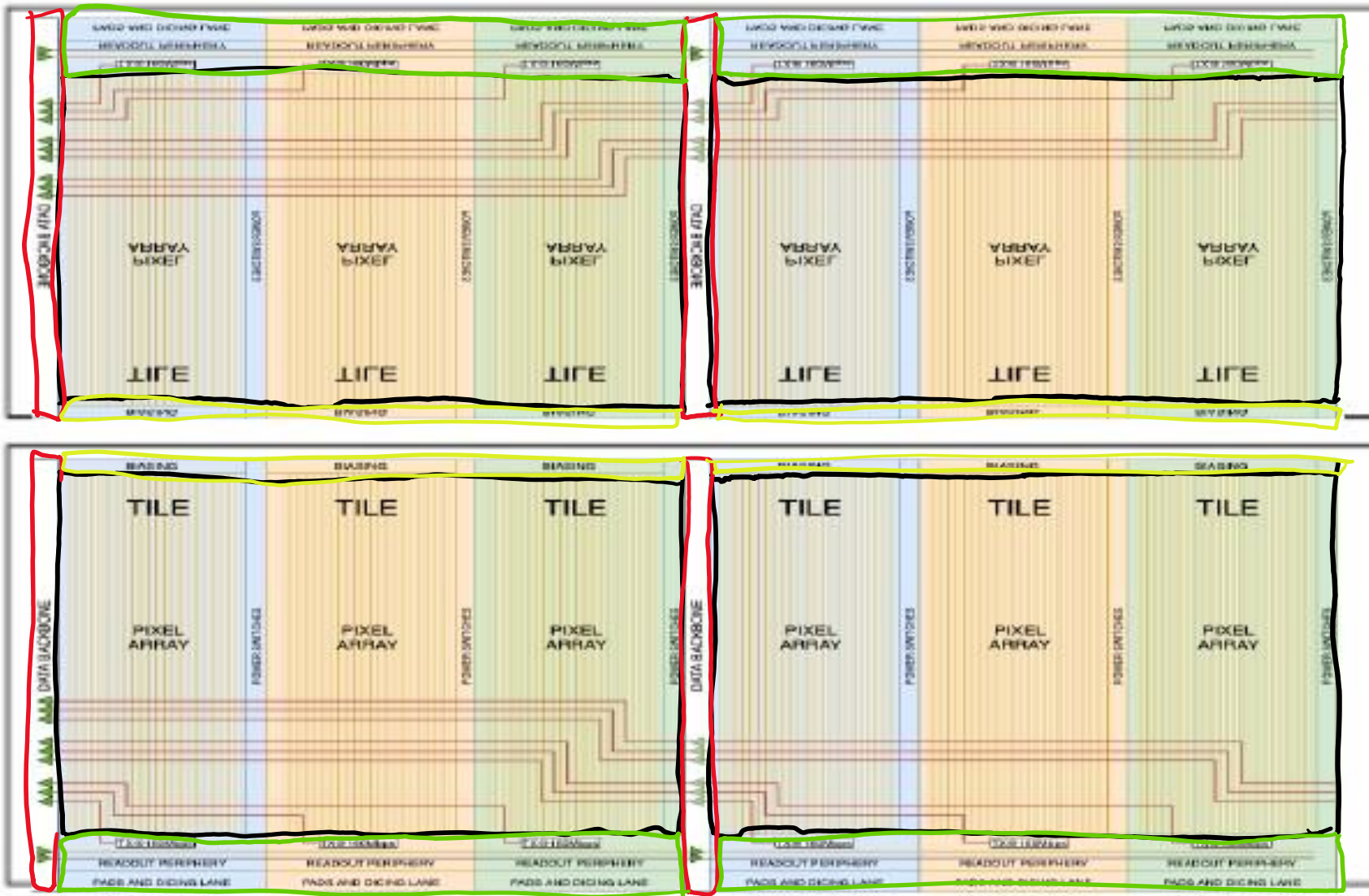


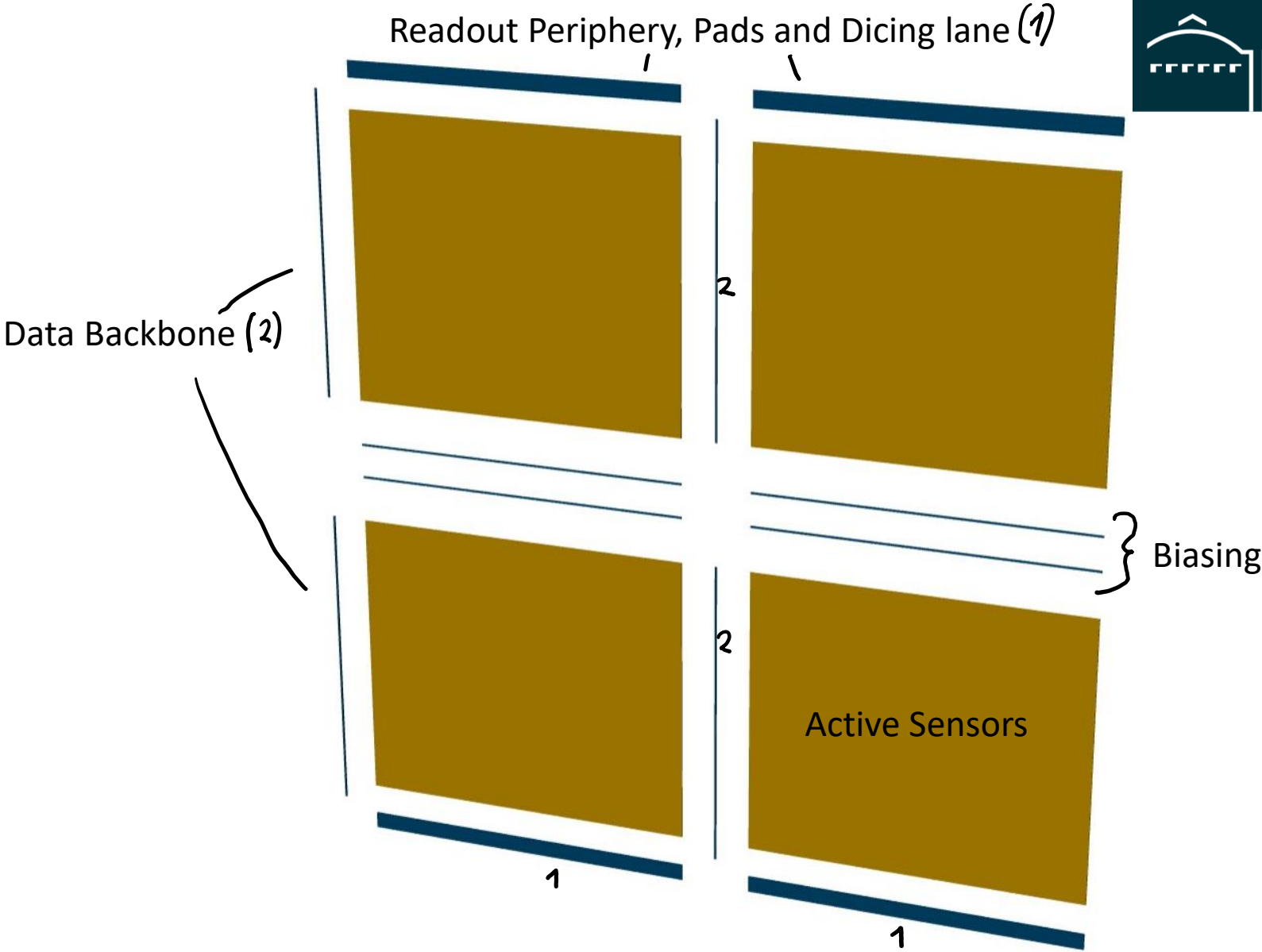


Inner Barrel

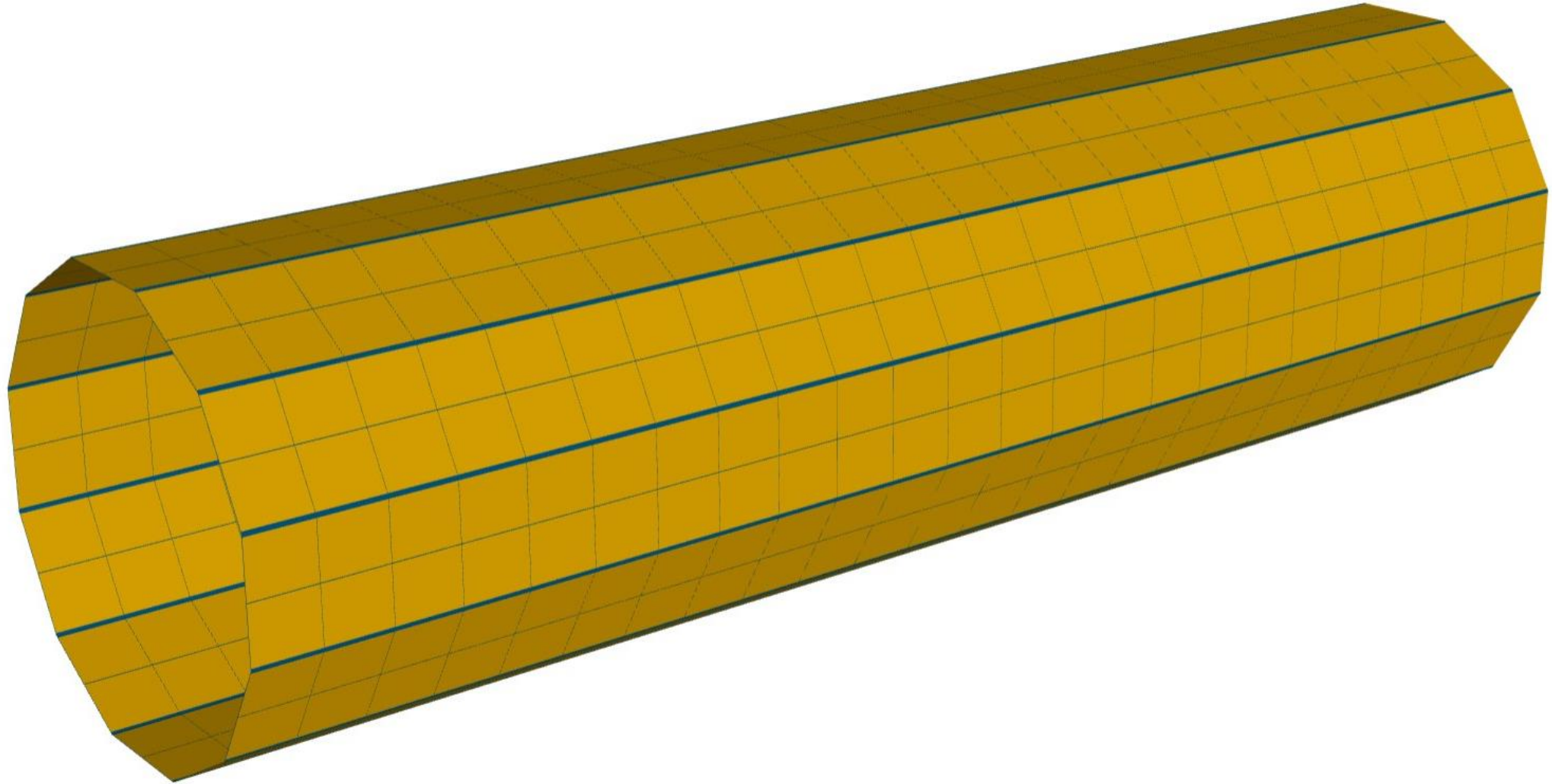
- Currently used for simulations
- Perfectly Cylindrical
- All Active







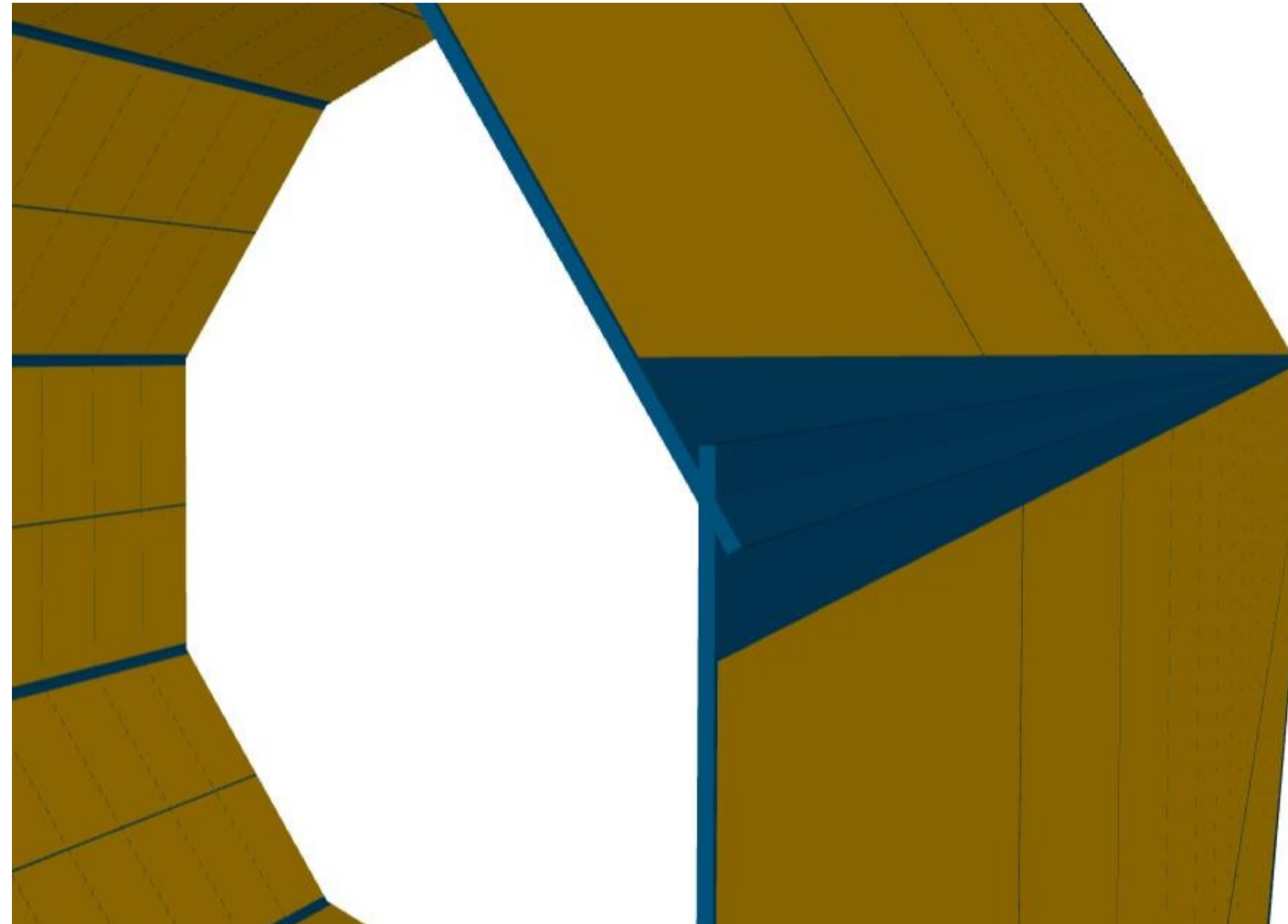
More realistic Barrel





Issues with overlap

- Defined Barrel Radius with old sensor design
-> One of them has to change again
- Currently $r = 3.6$ cm
-> 12 RSUs with 18.85 mm possible arclength
- Current RSU width = 19.564 mm



Summary & Outlook

- Barrel geometry was assembled with actual sensor design
- Find final design/radius
- Think of ways to achieve cylindrical shape
- Simulations to test performance to be done