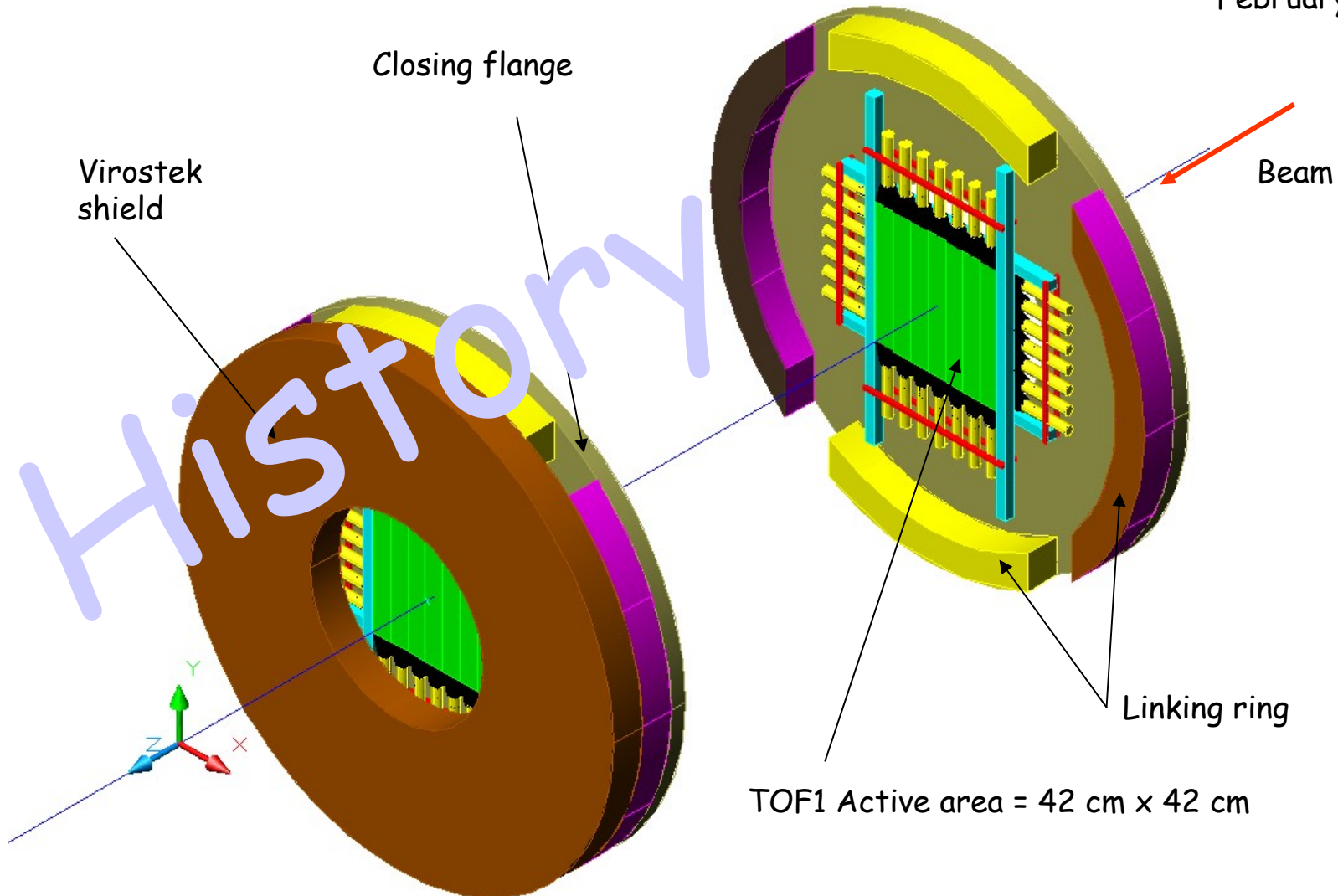
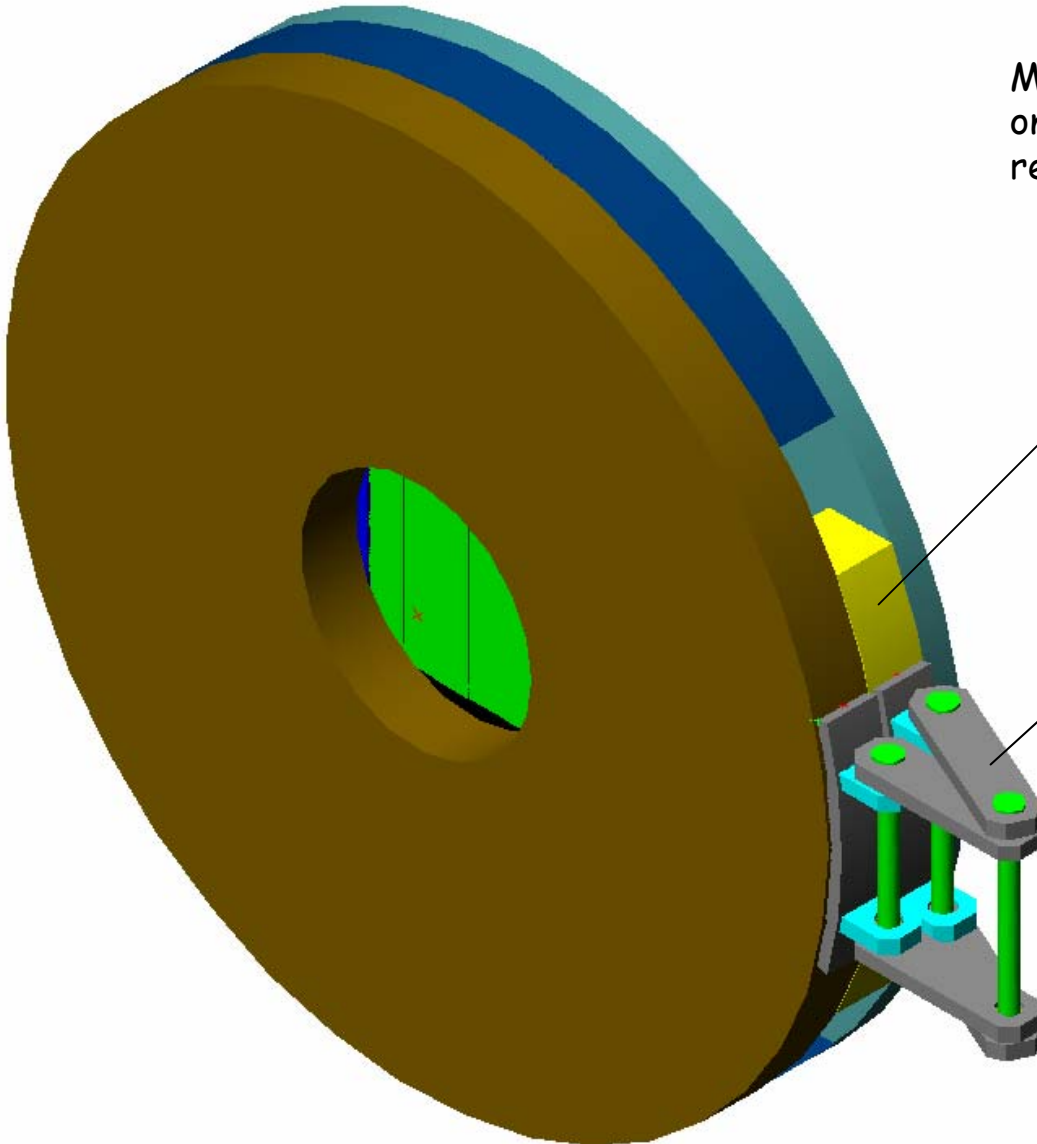


Gh. Grégoire  
February 16, 2007





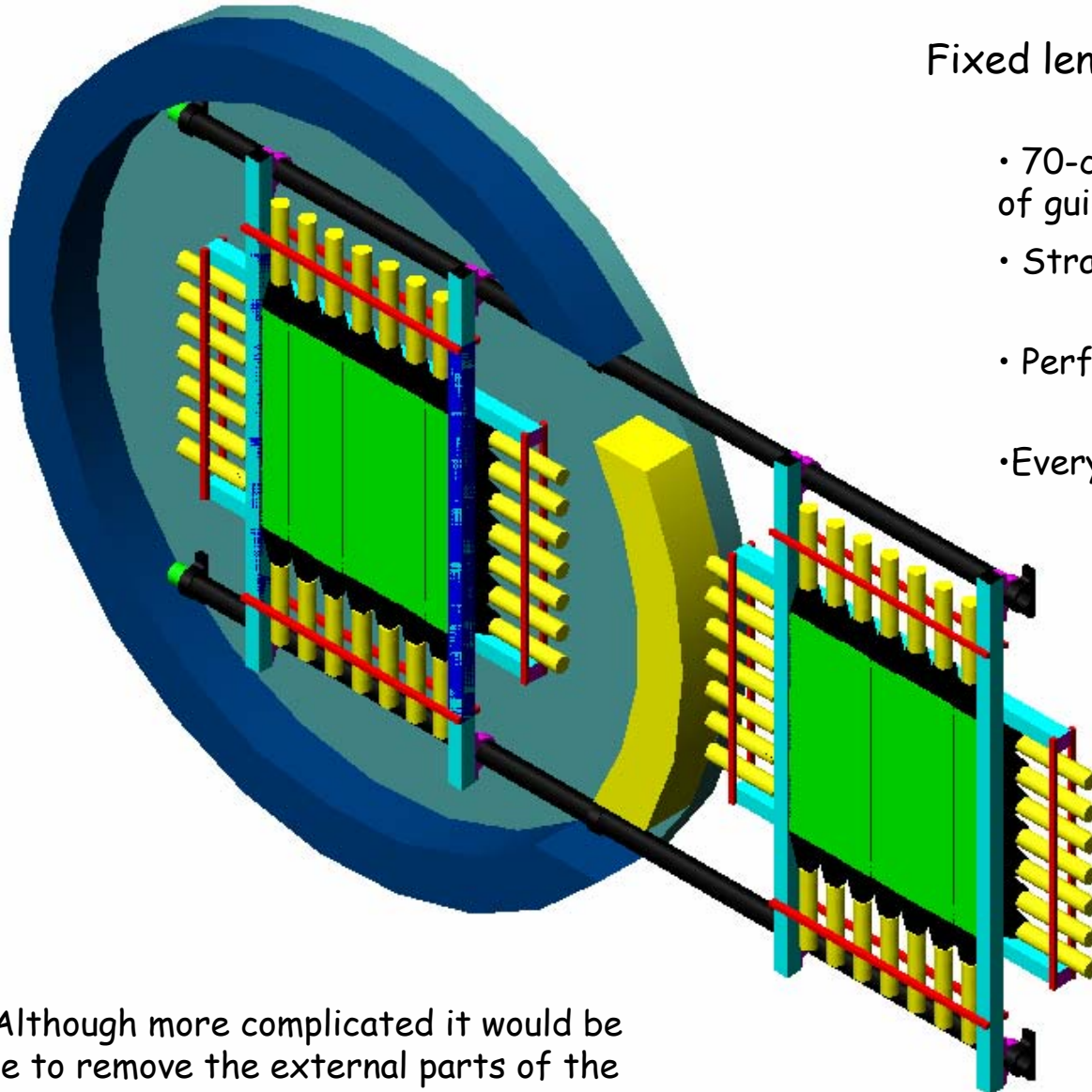
Magnetic linking ring (blue) has one movable part (yellow). The rest is completely closed.

Weight ~ 60 kg

3-axis hinge mechanism (shown here without stiffeners)

Axes are provided with conical roller bearings

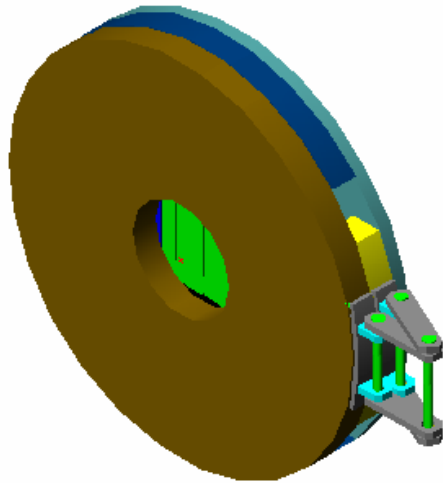
Motion is easily done hand !



## Fixed length guide tubes

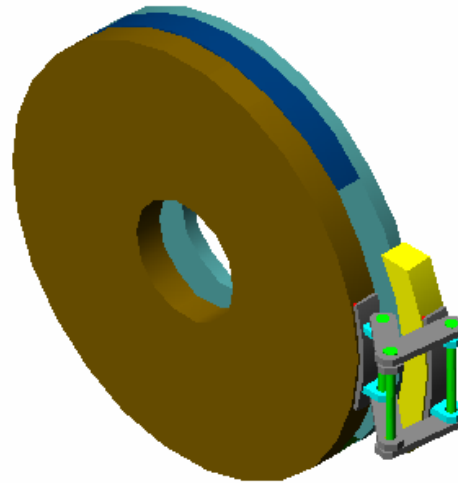
- 70-cm wide permanent extension of guide tubes outside shield
- Straightforward to construct
- Perfect stability at all positions
- Everything in aluminium or plastic

Note. Although more complicated it would be possible to remove the external parts of the tubes when TOF1 is in the beam

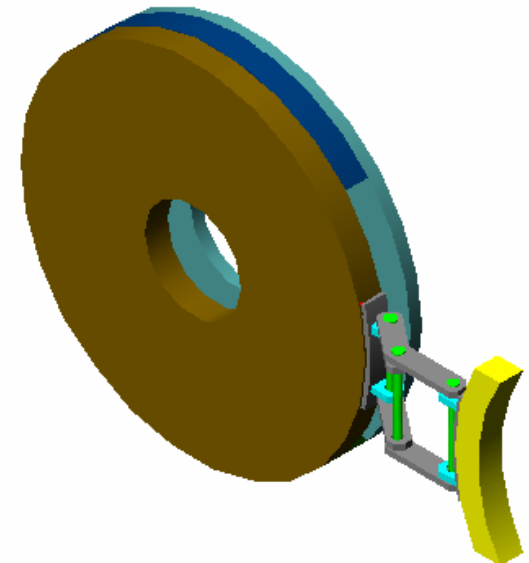


Closed position

Intermediate extracted position

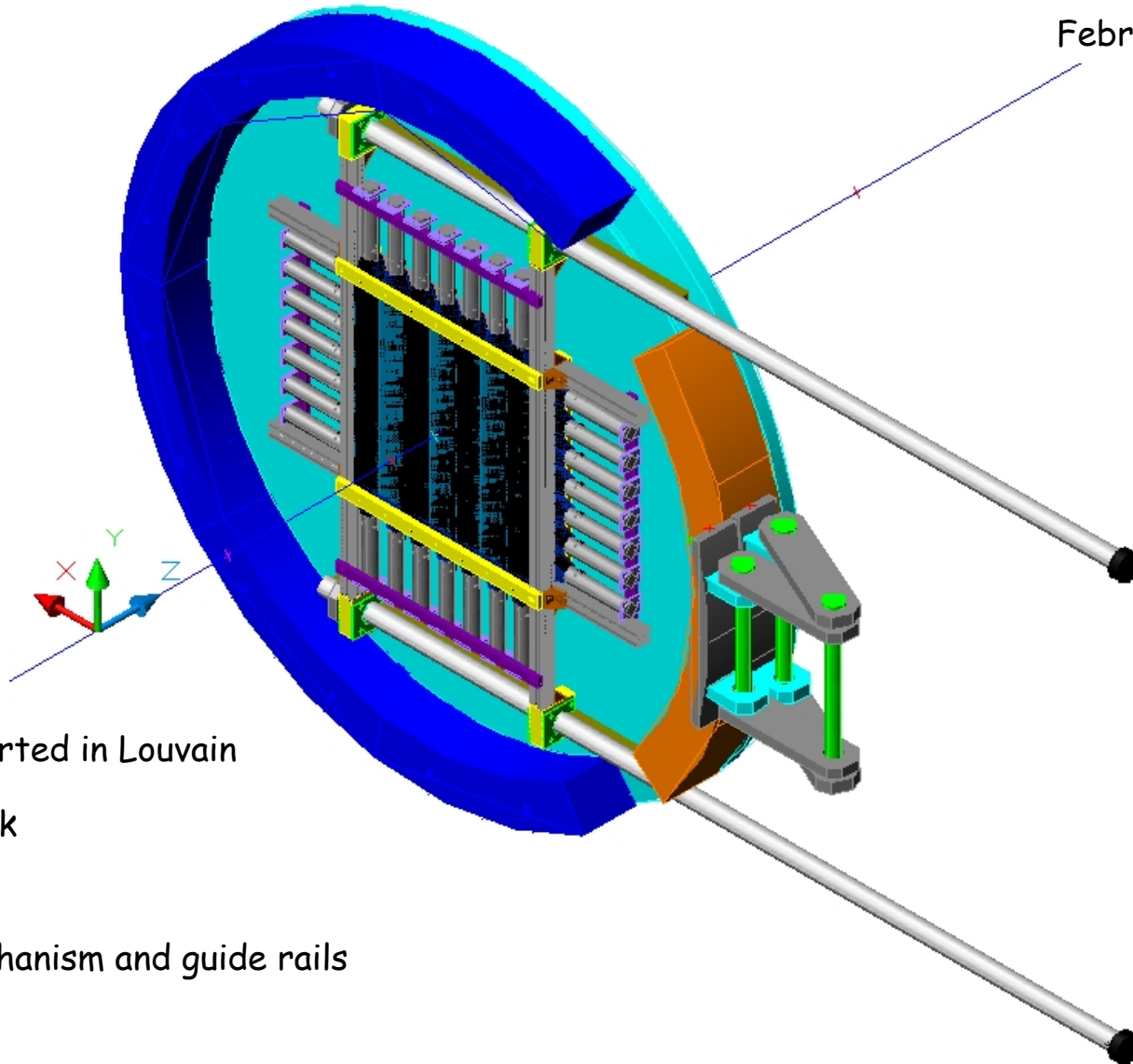


Fully open position



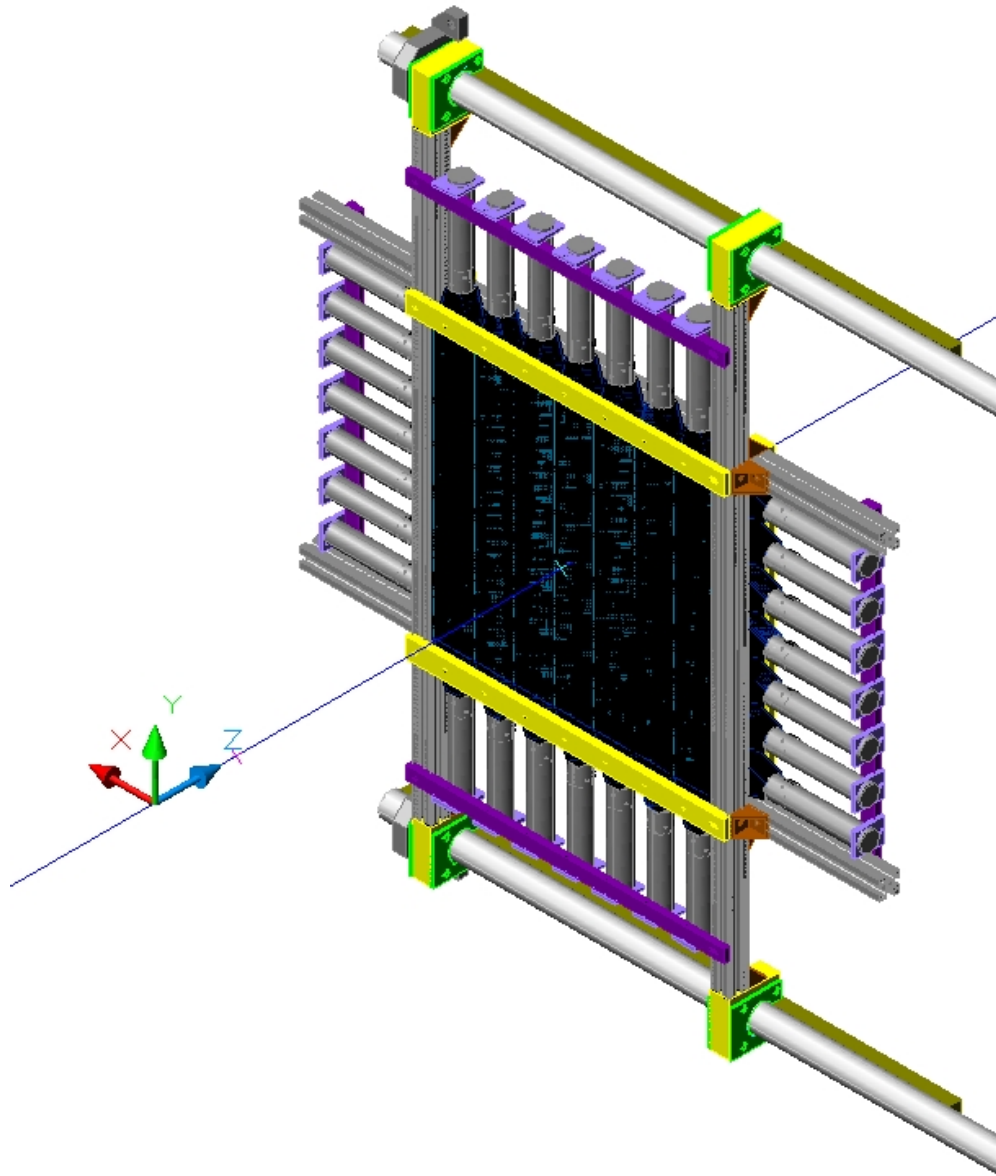
The split ring should be slightly wedged (tapered) to make the extraction motion more easy

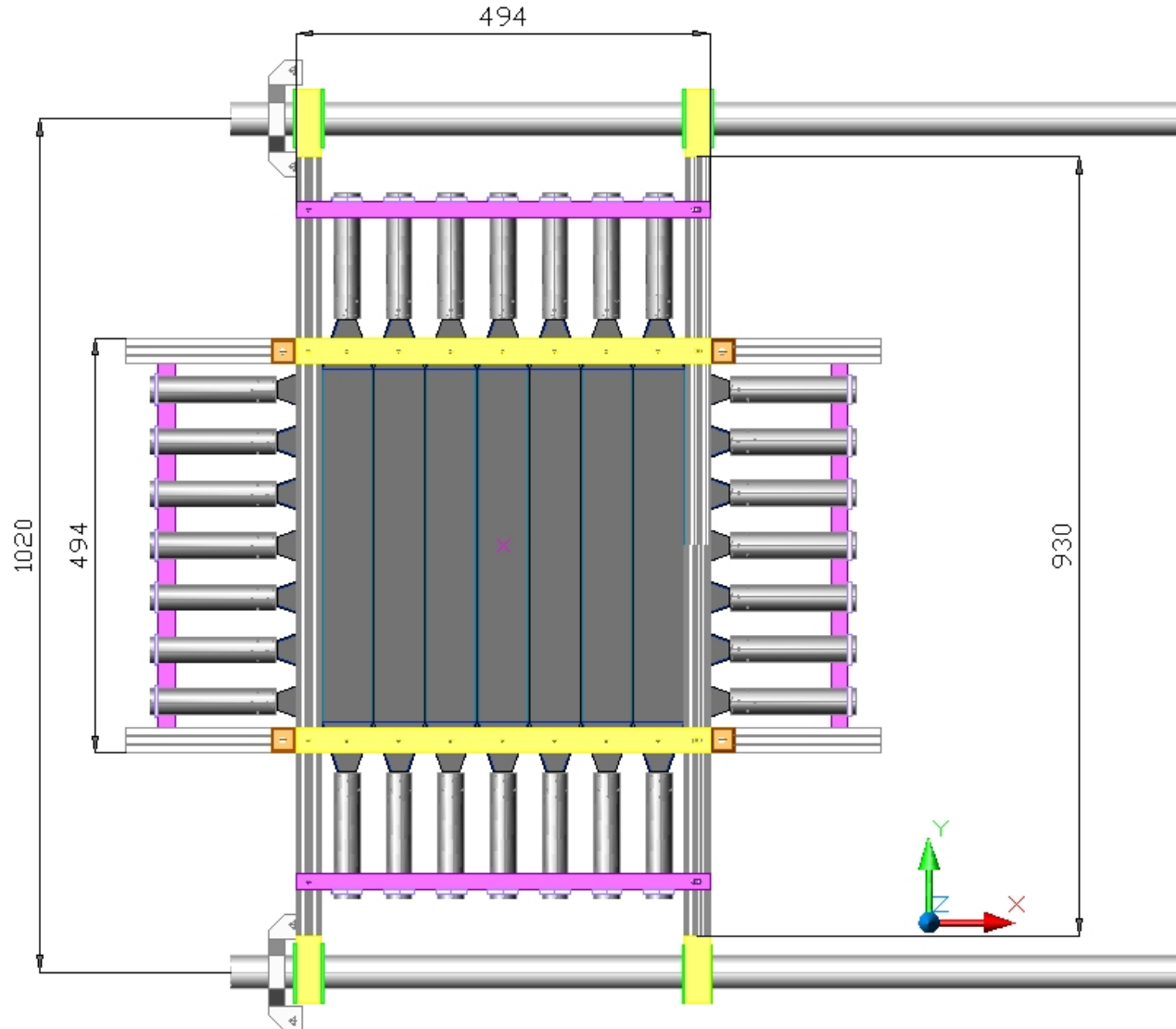
Gh. Grégoire  
February 11, 2008



Construction started in Louvain

- Closing disk
- Split ring
- Hinge mechanism and guide rails





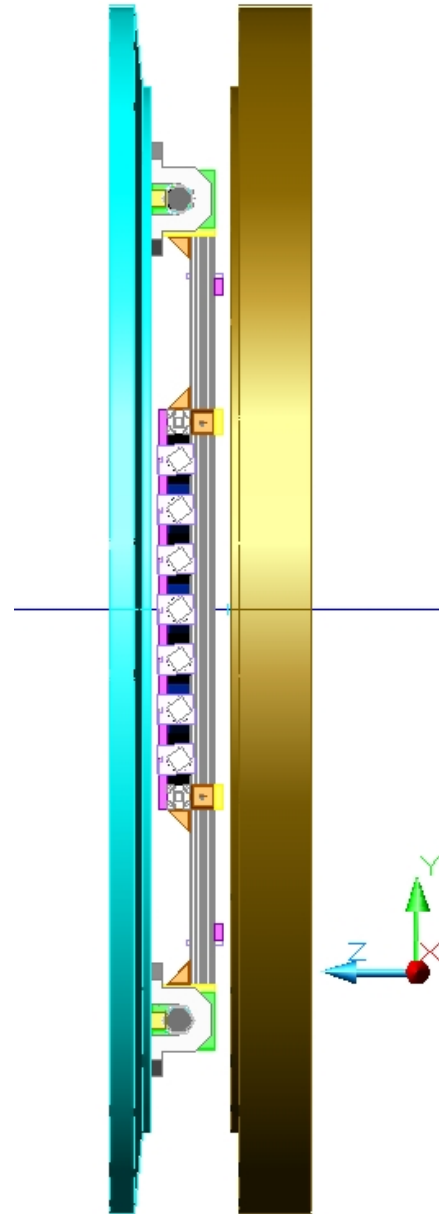


# Side view of TOF1 inside cage



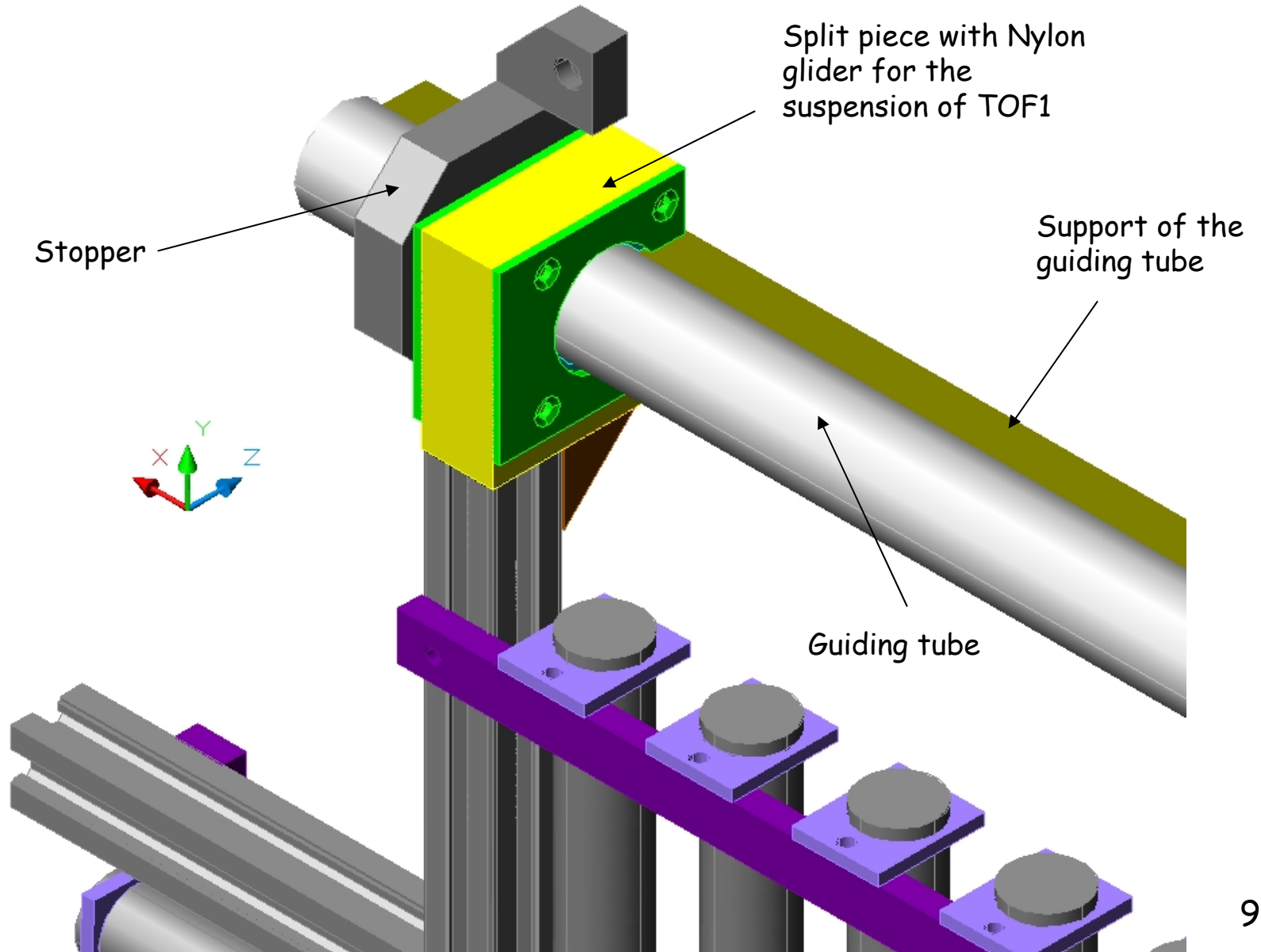
TOF1 is 82 mm thick (along z)

It is hung in the middle of the 100-mm gap between Virostek and closing flange





# Detail of stopper





# Decisions, budget and management



- Quotation from Louvain accepted by the Executive Board (end of Jan)
- Louvain agreed (Feb 01)

1. To construct the hinge mechanism ( « operation costs »)	}	8 -9 k€
2. To subcontract the other large pieces in the industry (closing flange, split ring)		Contributed by Geneva
3. To charge myself with the management of the construction		0 €
4. To freely contribute to MICE with the manpower costs		5-6 k€

- Other expenses: packaging and transport to RAL not included in the quotation