

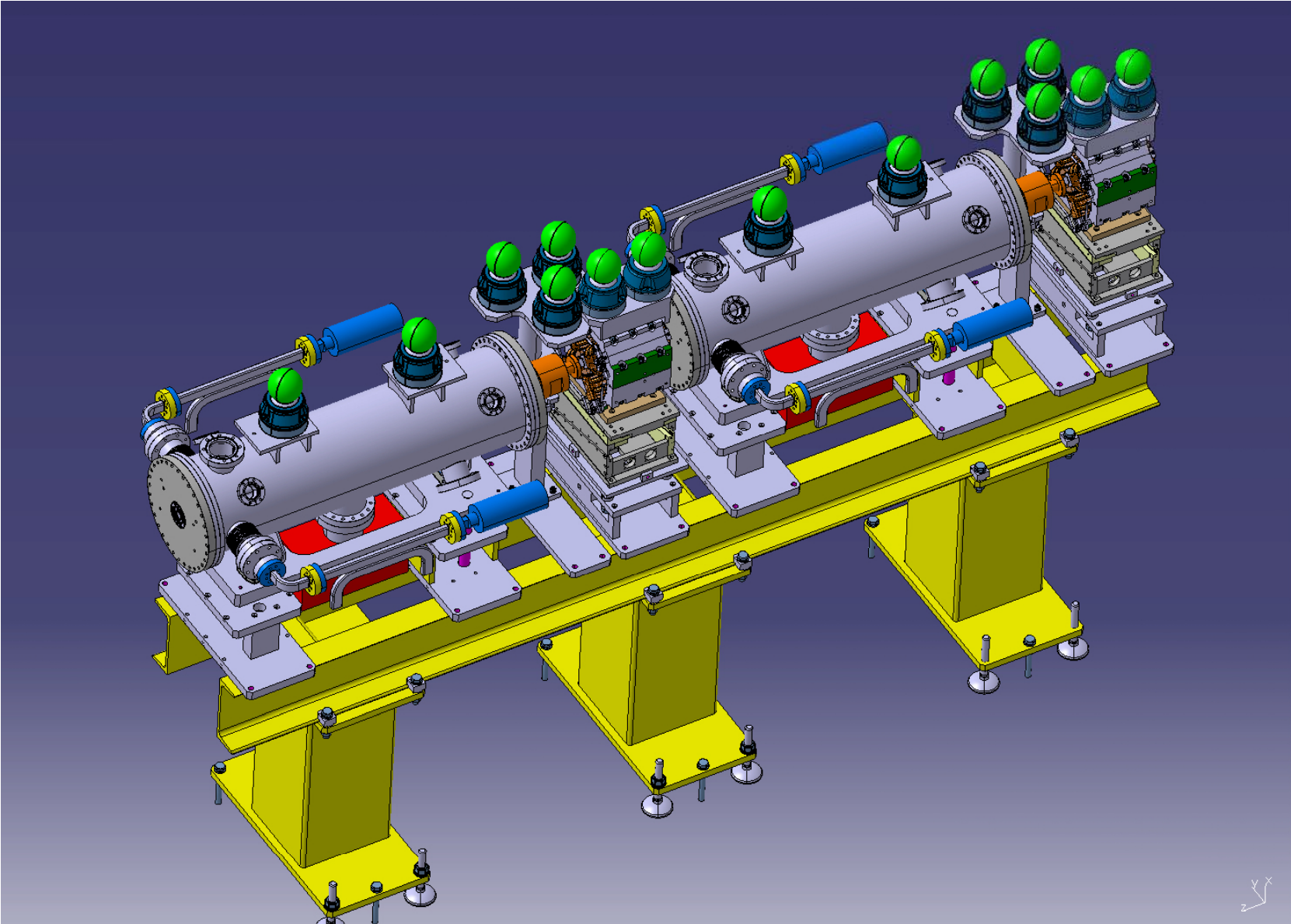
# TBL update

- **Status of components**
- **Installations Plans for shutdown 2008/2009**
- **Schedule**

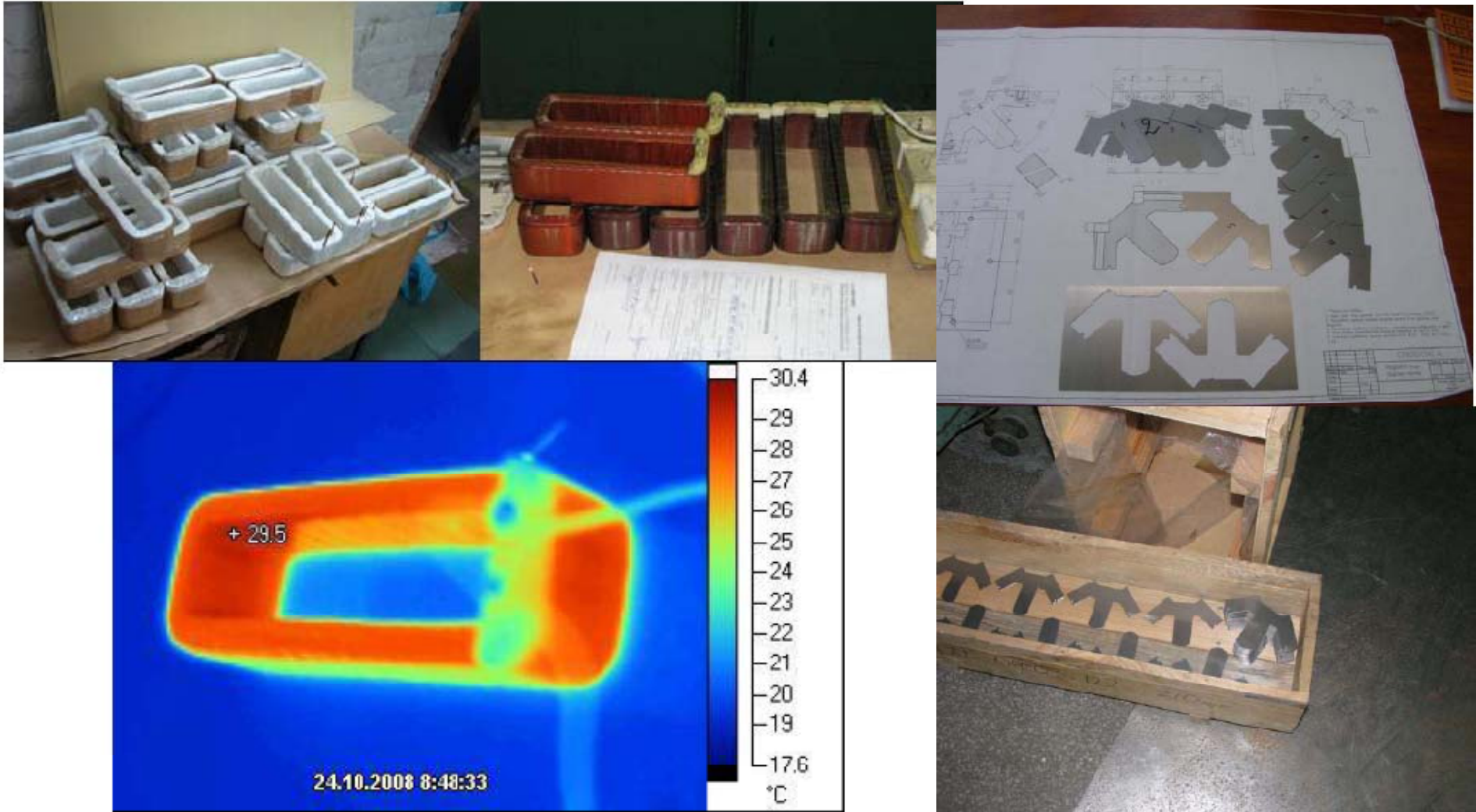
# Status of the prototype components

- PETS tank: under fabrication at CIEMAT (see Fernando's talk)
- BPM's: 2 prototypes finished, one installed under test with beam ringing problem of the electronics' chain under investigation  
Series: under fabrication (see Angeles talk)
- Quads: Prototypes under assembly at Russia and CERN  
acceptance test planned for December  
Series fabrication started
- Quad-Movers: Prototype installed and tested,  
Series under fabrication (see F.Toral)
- High power rf: directional couplers, loads prototypes  
under fabrication,  
Series: CEA white paper contribution for 8 sets
- Low Level rf: channels for prototypes testing available
- Other Beam diagnostics: defined and under fabrication

# Tank integration

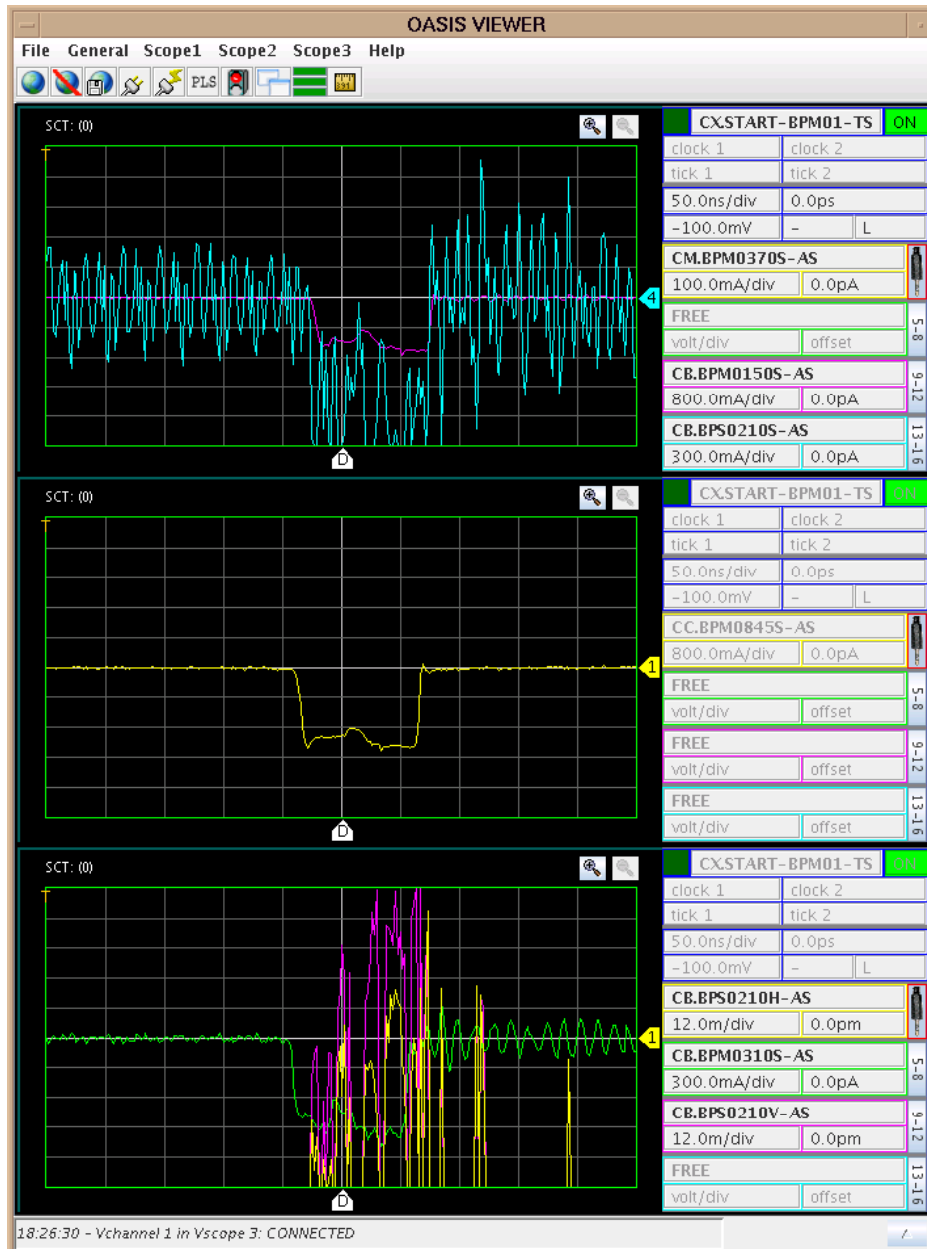


# Quadrupole production at BINP



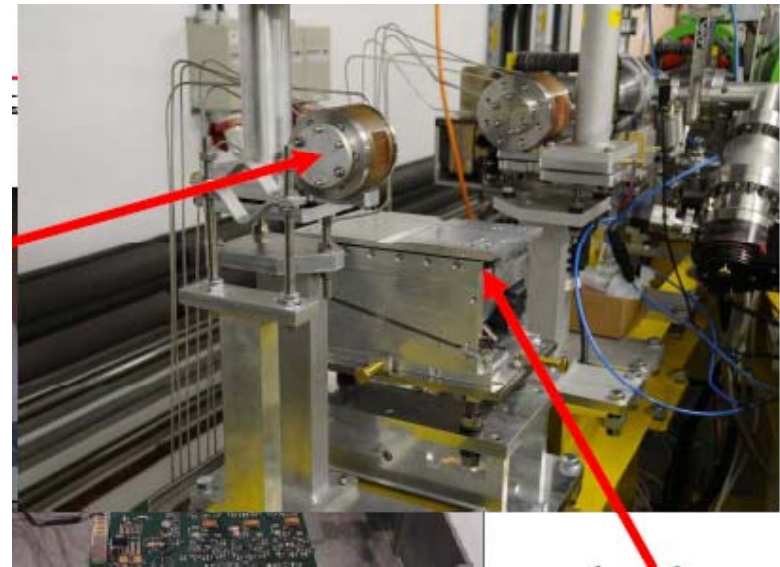
Series promised for End of January 2009, acceptance test December 2008

# BPS under beam test



First beam with losses,  
Ringing problem already  
detected with  
calibration pulses

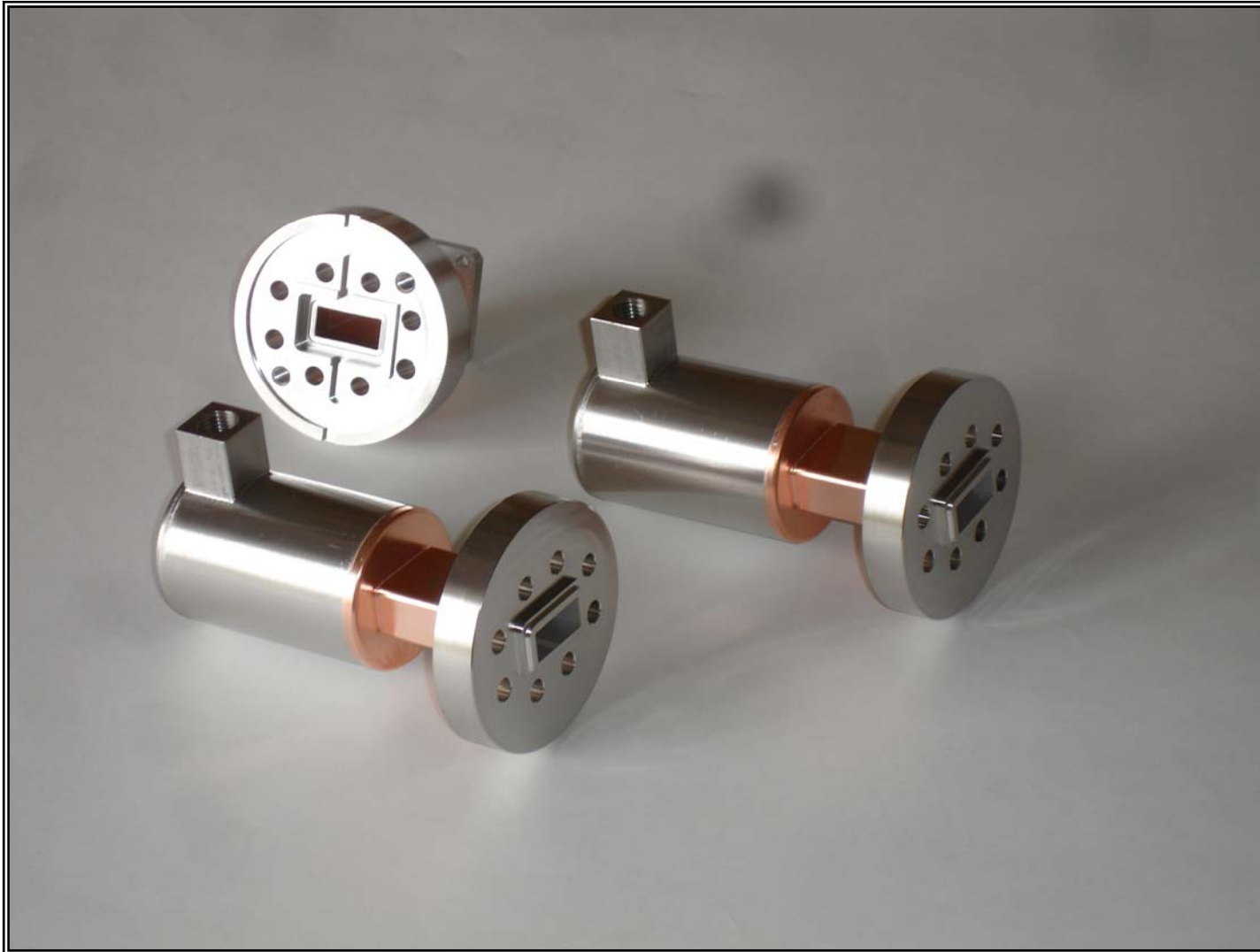
Experts will meet at  
CERN next week to solve  
this one



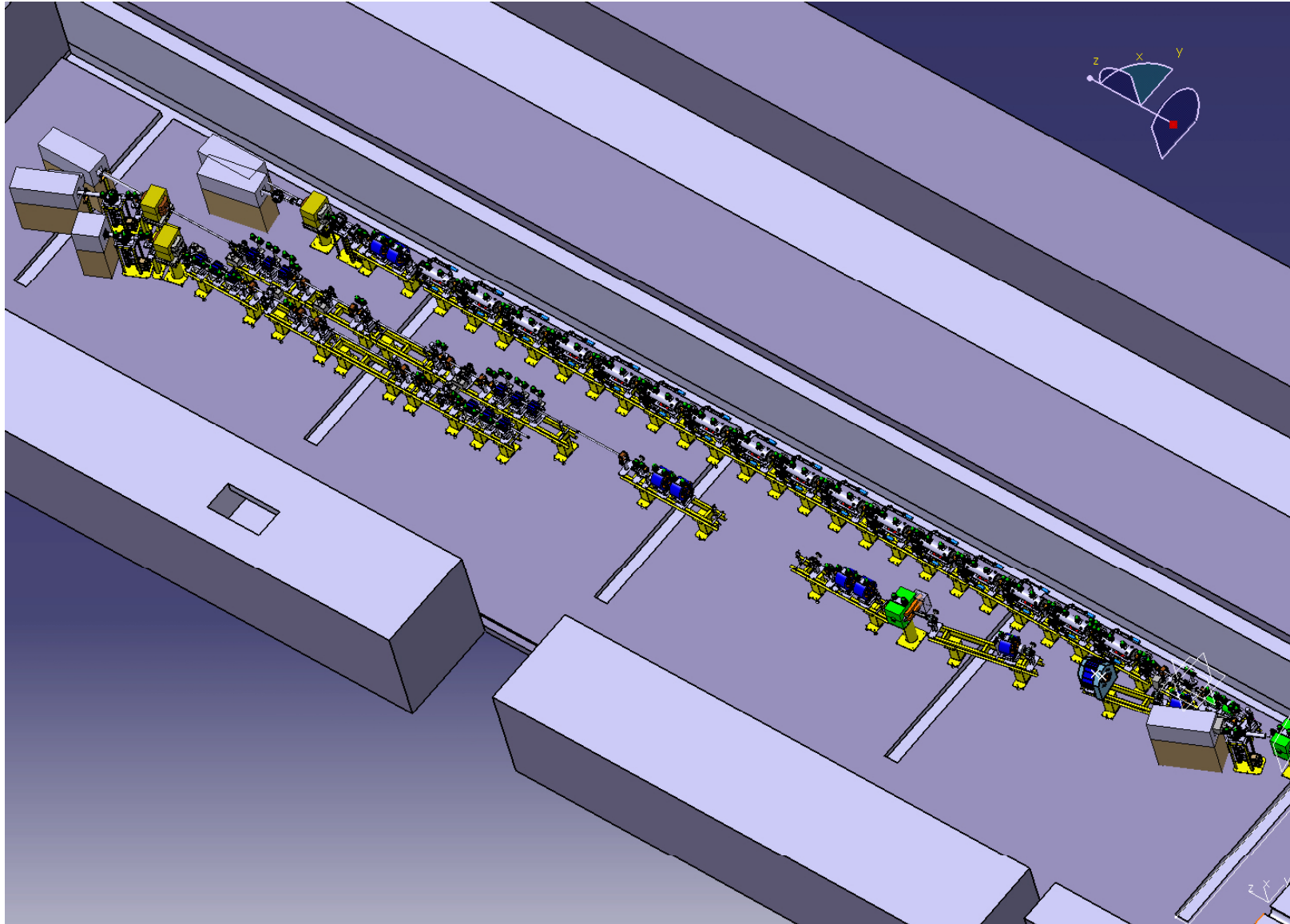


# RF components prototypes, high power load at factory

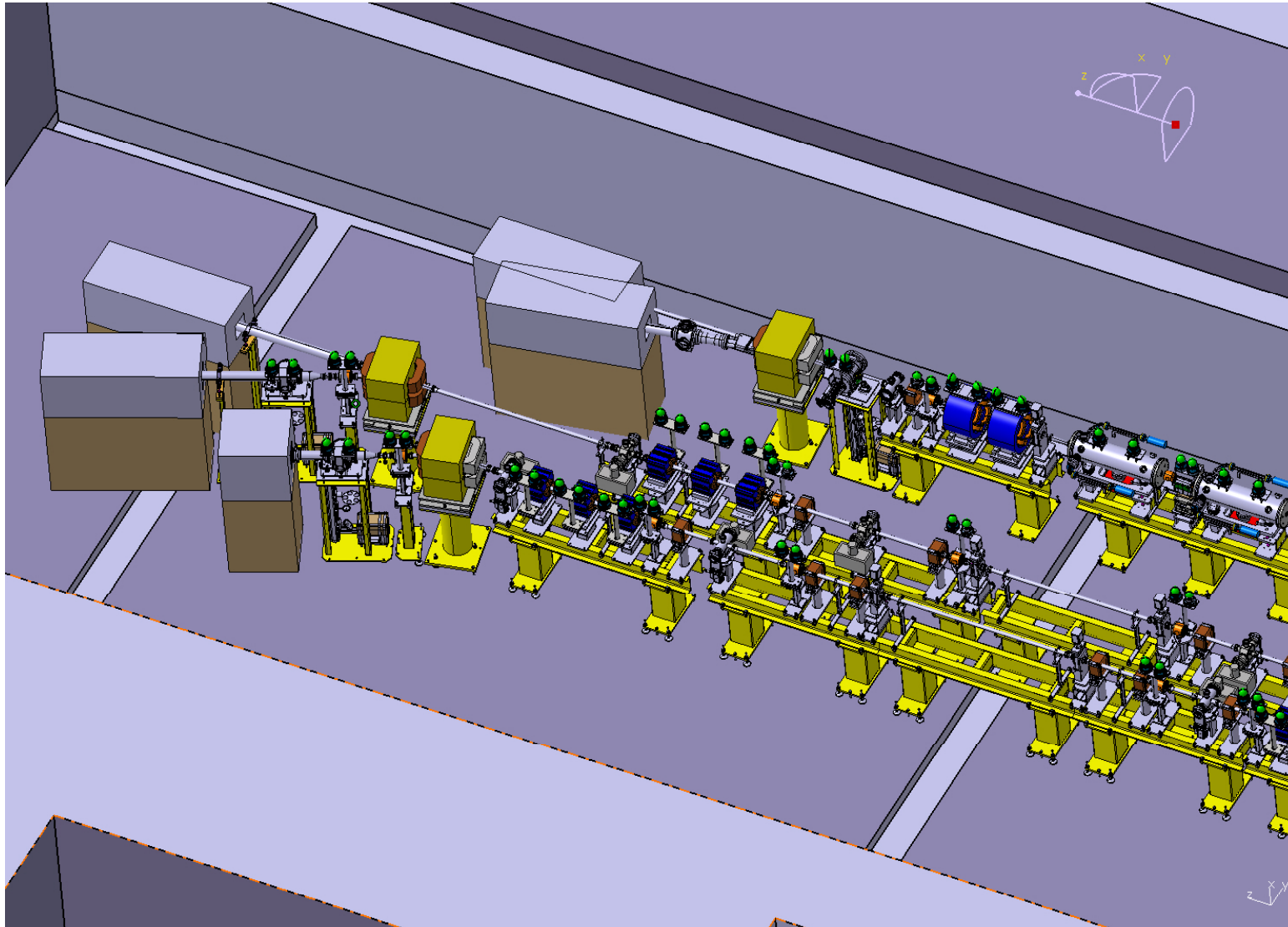
Water load with disk window, compact and inexpensive



# TBL integration into CLEX



# TBL diagnostic section





# Installation-Schedule

- Install beam line as far as possible, limited by component delivery girders, supports, cabling, prototype PETS-tank if possible Quads, BPS, vacuum system and end of line spectrometer
- We will not have more than one PETS tank and only 3 movers

Task Name	Duration	Schedule																			
		r.2008			January 2009				February 2009				March 2009				April 2009				
		50	51	52	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
		08.12	15.12	22.12	29.12	05.01	12.01	19.01	26.01	02.02	09.02	16.02	23.02	02.03	09.03	16.03	23.03	30.03	06.04	13.04	
<b>TBL</b>	1 day																				
Install. Module prototype	1 day																				
Tracage geometres	1.5 days								26.01	27.01											
Pose 8 poutres	8 days								27.01												
Deplacement Dump	1 day							07.01	07.01												
Tirage de cables ensemble elements	15 days												23.02								
Delivery Q.	1 day												23.02								
Install. 3 Q. + table de reglage mover	2 days												24.02	25.02							
Install. 13 Tables de reglage standart	3 days												26.02		02.03						
Install. 13 Q.	3 days												03.03	05.03							
Install. MTV	3 days												06.03		10.03						
Connexion electrique elements	5 days													11.03		17.03					
Alignement elements	5 days														18.03		24.03				
Install. 16 BPS	5 days															25.03		31.03			
Install. Vide	5 days																	01.04		07.04	
Install. Electr.BPS- LAPP/Barcelone	10 days																	01.04			14.04

# Conclusions

- TBL is happening now
- Delays a bit everywhere, components, planning, testing, fabrication, but still reasonable given the available resources and complexity
- Beam line installation planned for winter shutdown, second shutdown in summer 2009 to finish up and install more PETS if possible
- Critical to test PETS tank prototype, pacing item for future decisions !
- Testing rf components might become an issue
- Overall TBL goal with respect to CDR in 2010 should be soon reviewed