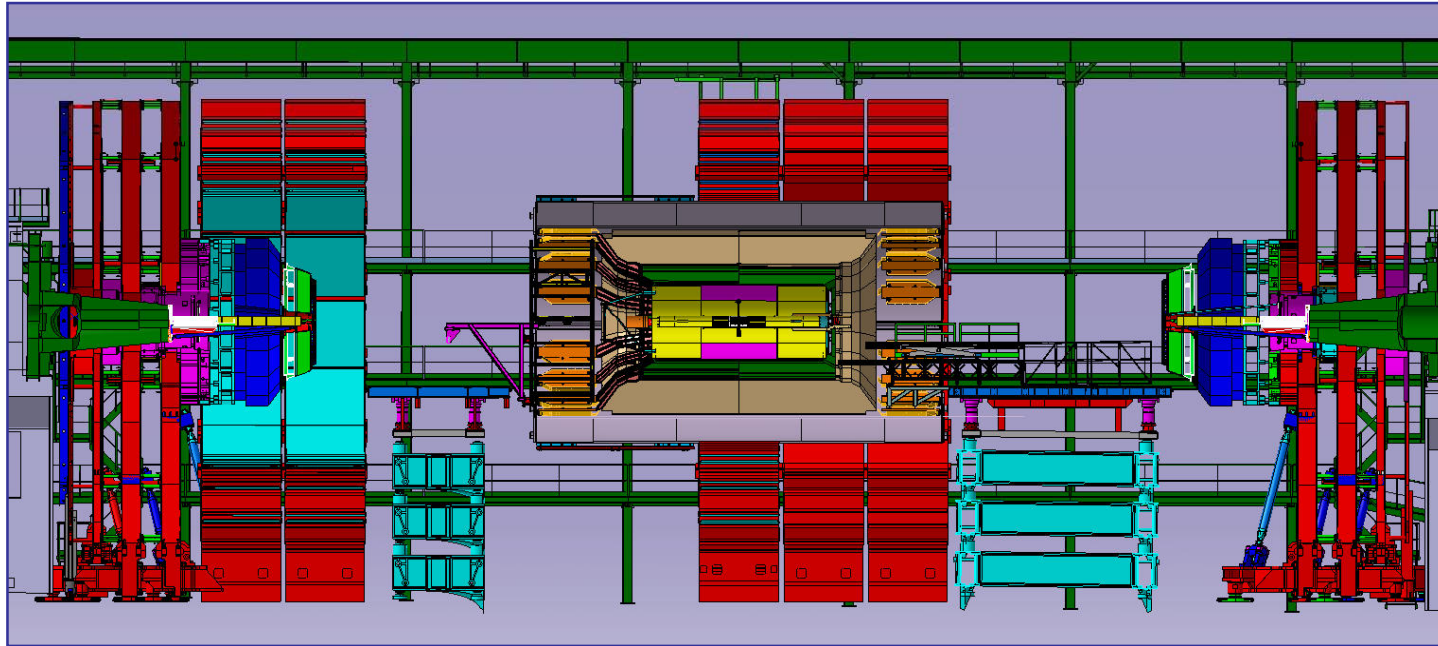


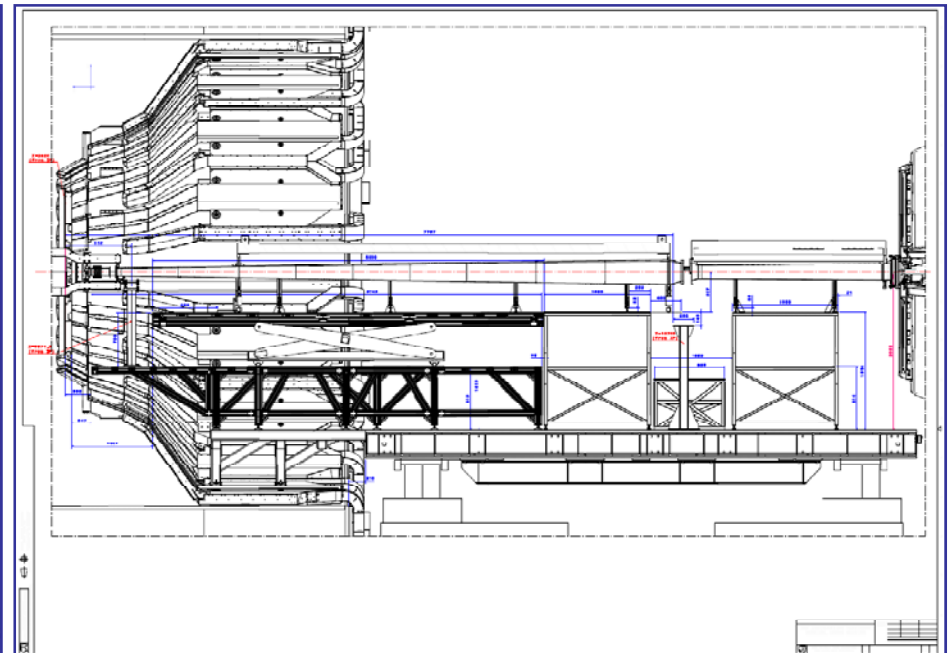
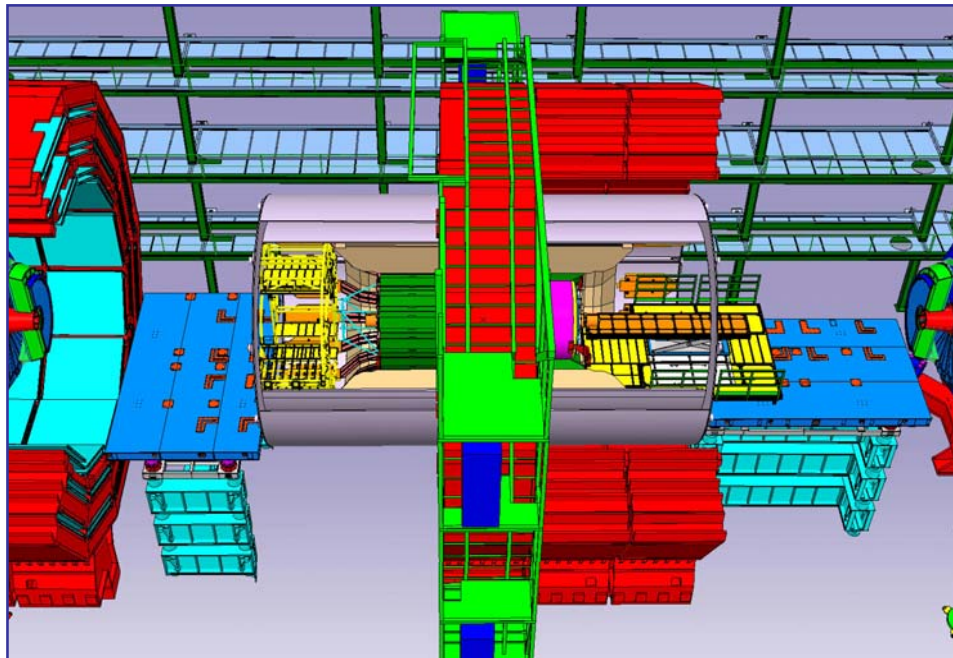
Handling a 3D model in CATIA

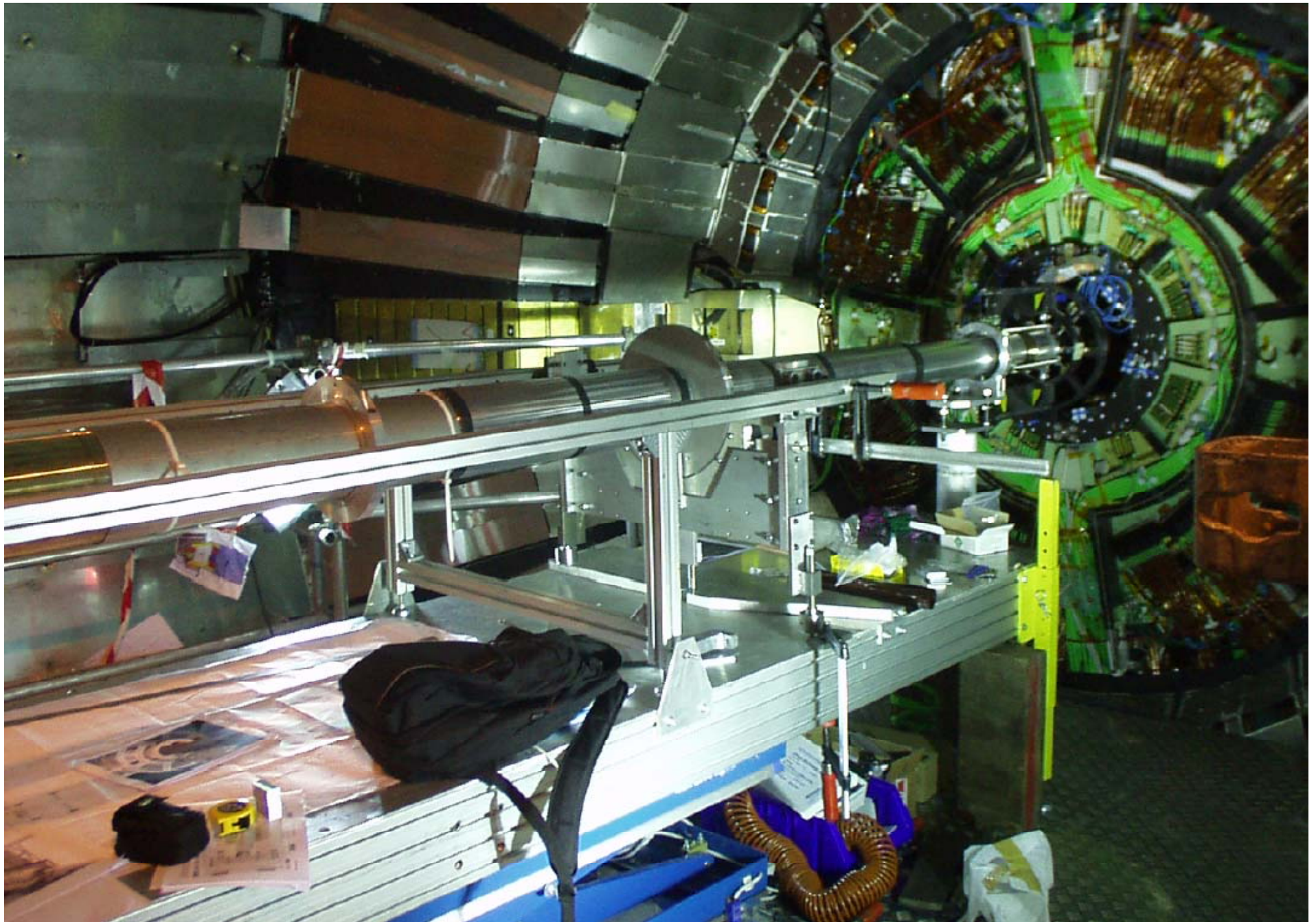


## CATIA@CMS E&I

- from January 2007
- conversion
- organization

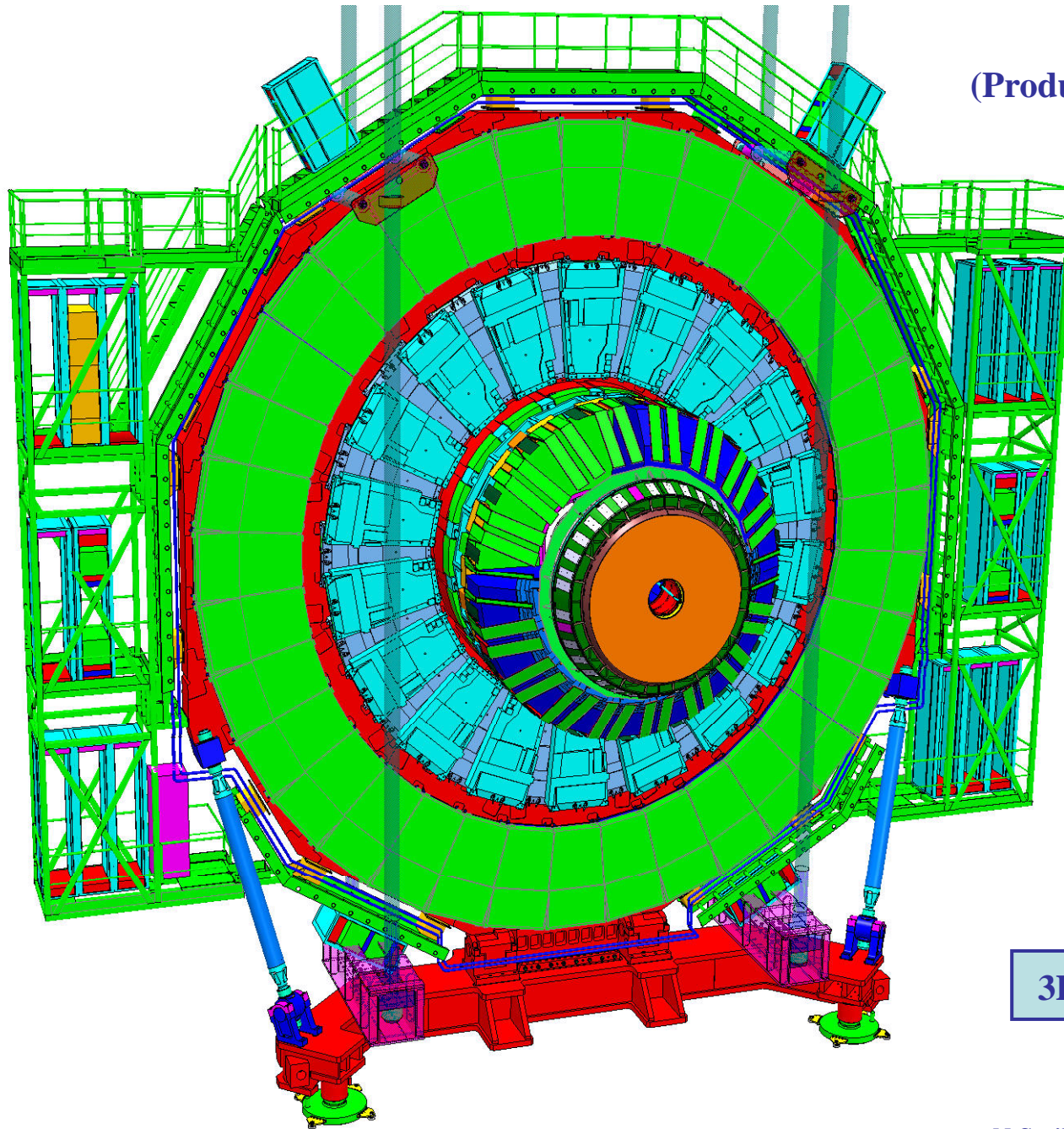
- Top-down design
- Concurrent engineering workflow





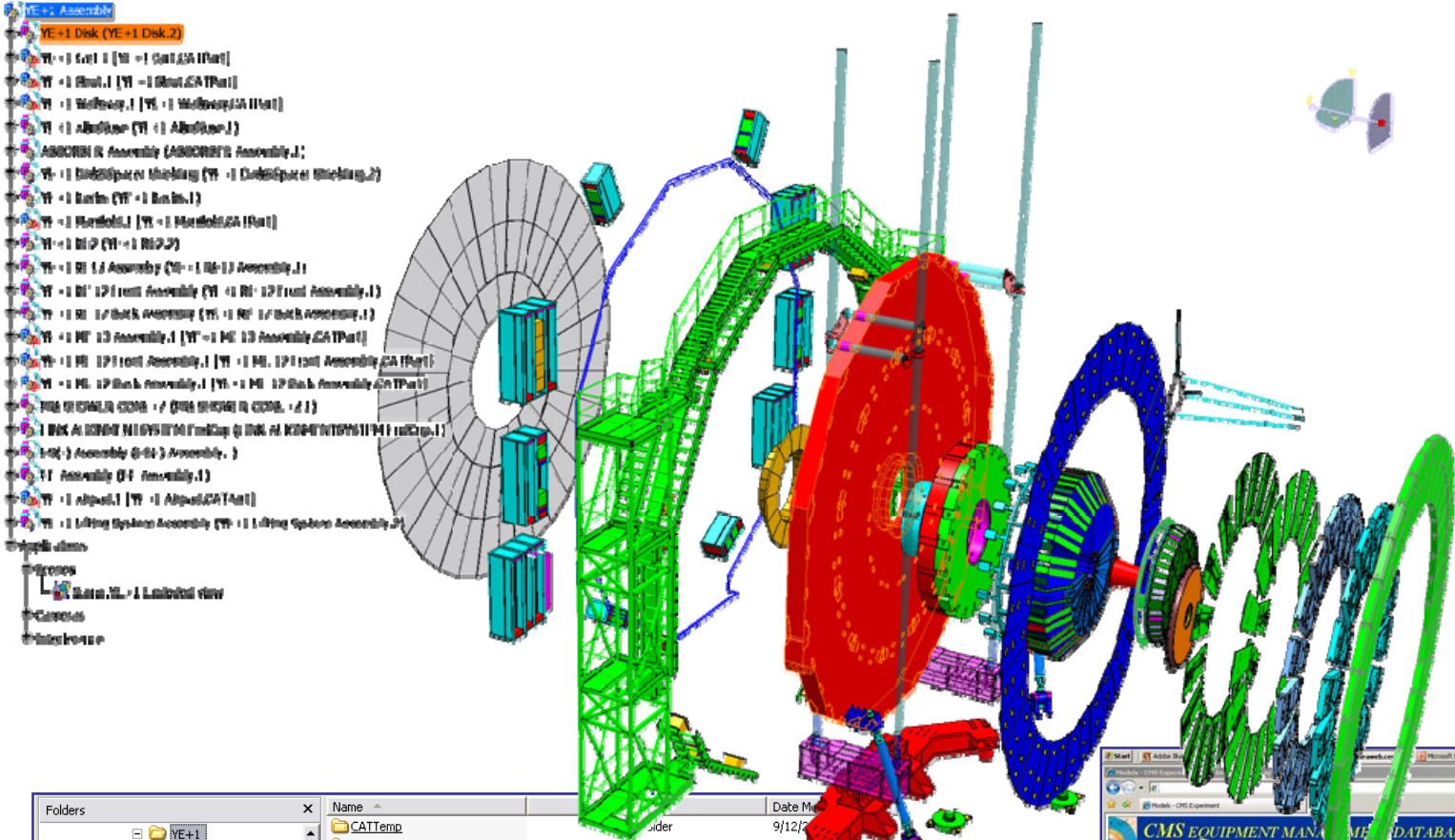
*N.Smiljkovic, ETH-Z@CERN, January 2009.*

# PLM (Product Life cycle Management)



3D model of the YE+1

# Database



- YE+1 Assembly
- YE+1 Disk (YE+1 Disk.2)
- YE+1 Cart.1 [YE+1 Cart.1Part]
- YE+1 Strut.1 [YE+1 Strut.CATPart]
- YE+1 Walway.1 [YE+1 Walway.CATPart]
- YE+1 AlinNose [YE+1 AlinNose.1]
- ABSORBER Assembly (ABSORBER Assembly.1)
- YE+1 EndSupport Shielding [YE+1 EndSupport Shielding.2]
- YE+1 Racks [YE+1 Racks.1]
- YE+1 Manifold.1 [YE+1 Manifold.CATPart]
- YE+1 RE2 [YE+1 RE2.2]
- YE+1 RE 12 Assembly [YE+1 RE 12 Assembly.1]
- YE+1 RE 12 Front Assembly [YE+1 RE 12 Front Assembly.1]
- YE+1 RE 12 Back Assembly [YE+1 RE 12 Back Assembly.1]
- YE+1 ME 13 Assembly.1 [YE+1 ME 13 Assembly.CATPart]
- YE+1 ME 12 Front Assembly.1 [YE+1 ME 12 Front Assembly.CATPart]
- YE+1 ME 12 Back Assembly.1 [YE+1 ME 12 Back Assembly.CATPart]
- THE ORIGINAL CODE - / THE ORIGINAL CODE - / 1)
- 1) BK At KINOT HIGH SYSTEM (1) BK At KINOT HIGH SYSTEM (1) catPart.1
- 1) Assembly @-04) Assembly. )
- 1) Assembly @F Assembly.1)
- YE+1 Airpad.1 [YE+1 Airpad.CATPart]
- YE+1 Lifting System Assembly [YE+1 Lifting System Assembly.2]

Folders	Name	Date Modified	Size	Type
YE+1	CATTemp	9/12/2008 11:15 AM		Folder
	DataBase	9/12/2008 11:15 AM		Folder
	Picture	11/11/2008 1:21 PM		Folder
	Pictures	1/19/2009 10:47 PM		Folder
	Ressources	9/9/2008 1:21 PM		Folder
	YE+1 Airpad	9/12/2008 11:15 AM		Folder
	YE+1 Alin Nose	9/12/2008 11:15 AM		Folder
	YE+1 Cart	9/12/2008 11:15 AM		Folder
	YE+1 Disk	9/12/2008 11:15 AM		Folder
	YE+1 Lifting System	9/12/2008 11:15 AM		Folder
	YE+1 Manifold	9/9/2008 1:52 PM		Folder
	YE+1 ME 12 Back	9/9/2008 4:38 PM		Folder
	YE+1 ME 12 Front	9/9/2008 4:31 PM		Folder
	YE+1 ME 13	9/9/2008 4:20 PM		Folder
	YE+1 Racks	9/12/2008 11:15 AM		Folder
	YE+1 RE2	9/12/2008 11:15 AM		Folder
	YE+1 RE13	9/12/2008 11:15 AM		Folder
	YE+1 RE 12 Back	9/12/2008 11:15 AM		Folder
	YE+1 RE 12 Front	9/12/2008 11:15 AM		Folder
	YE+1 Shielding	9/12/2008 11:15 AM		Folder
	YE+1 Strut	9/9/2008 1:07 PM		Folder
	YE+1 Walway	9/9/2008 1:41 PM		Folder
	Federated_ClashPublish_12 ...	9/12/2008 9:58 AM	1,075 KB	XML Document
	YE+1 Assembly_3dxml	9/12/2008 10:16 AM	27,516 KB	Dassault Systemes ...
	YE+1 Assembly.CATProduct	9/12/2008 11:15 AM	2,640 KB	CATIA Product

**CMS EQUIPMENT MANAGEMENT DATABASE**

GENERAL INFORMATION FOR YE 3 Disk

Selected number of MODELS: 5

Referenced PART: YE 3 Disk

Number of Parts: 107

Number of MB Codes: 0

Group Name: CountModel 3d

Mechanical models: 1

Model Name	Detector Part	Comment	Edits Number	PREVIEW	Type of Model	Split Item
YE3Disk01	Mechanical Structure	MECHANICAL DESKTOP PSL			Mechanical models	Desat
YE3Disk02	an_Plan_YE3	MECHANICAL DESKTOP PSL				
YE3Disk03	Table_YE3	MECHANICAL DESKTOP PSL				
YE3Disk04	CatPart_YE3	MECHANICAL DESKTOP PSL				
YE3	CatPart_YE3	MECHANICAL DESKTOP PSL				

PARTS MODELS FOR YE 3 Disk

NO PARTS MODELS FOUND.

N.Smiljkovic, ETH-Z@CERN, January 2009.

# CONCLUSION:

Compatibility with CATIA version

Avoid hybrid design !

Axis system

Organization

Folders	Name	Size	Type	Date Modified
Desktop	3D_ILD_CatiaR17		Folder	12/18/2008 8:32 AM
My Documents	ILD		Folder	12/18/2008 10:23 AM
My Computer	ILD_1		Folder	12/16/2008 11:54 AM
System (C:)	ILD Cavern		Folder	1/19/2009 12:20 AM
Local Disk (E:)	ILD Towers		Folder	12/18/2008 8:32 AM
New Volume (F:)	Integration		Folder	1/19/2009 1:43 PM
Dassault	ILD		Folder	12/18/2008 8:32 AM
ILD Detectors	Presentation		Folder	1/20/2009 4:50 PM
3D_ILD_CatiaR17				
ILD				
ILD 1				
ILD Cavern				
ILD Towers				
Tower segment				
Integration				
Drawings				
Pdf				
Pictures				
LP				
Presentation				
Support structure				
dfs on 'cern.ch' (G:)				
NEW VOLUME (H:)				
New Volume (I:)				
My Sharing Folders				
Nokia Phone Browser				
My Network Places				
Recycle Bin				

