



# STATUS MXCuBE SOLEIL

## About me and MXCuBE



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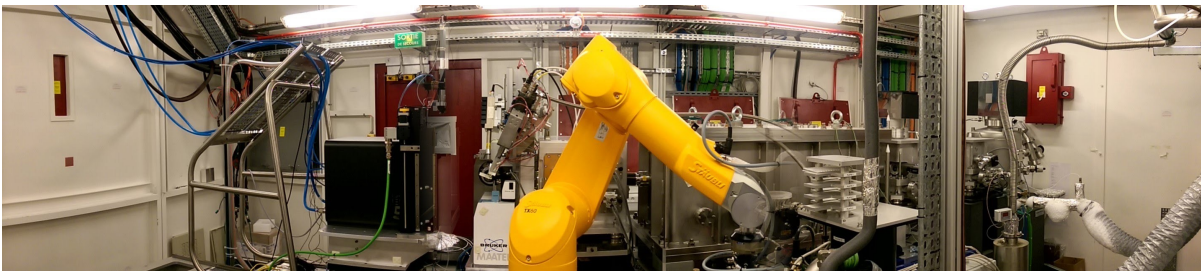
## About me and MXCuBE



## About BEAMLINEX PX1 and PX2



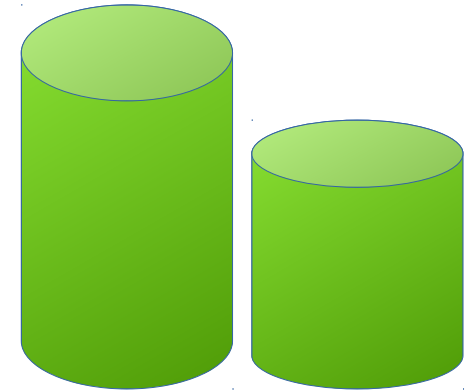
Energy range: 5.5-15.5 keV  
Beam size: 40x20  $\mu\text{m}^2$   
Speciality : big unit cell, large complexes  
Detector : **Pilatus 6M**  
Collect time : **less than 5 min.**  
Robot: **CATS-IRELEC** (3 Unipuck - 48 samples)  
Goniometer : **kappa 3-circle**



Energy range: 6-17 keV  
Beam size: 10x5  $\mu\text{m}^2$   
Speciality: Microcrystals  
Detector : **EIGER X 9M**  
Collect time : **less than 1 min.**  
Robot: **CATS-IRELEC** (9 Unipuck - 144 samples)  
Goniometer : **MD2**

## Status between PX1 and PX2

- Version 2.2 : PX1
- Divergence between two beamline
  - Project
  - Advanced mode
  - Code
- Merge common code



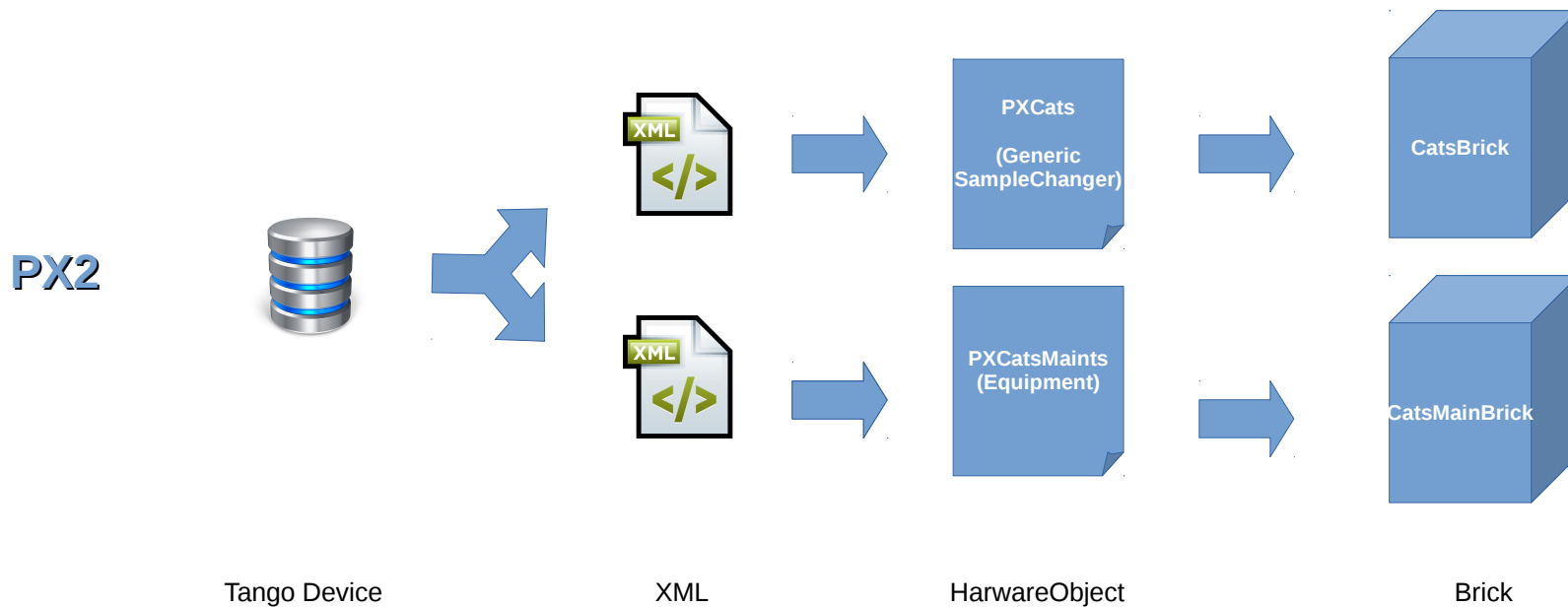


# Some Development PX1 & PX2

- Sample Changer Cats

# Some Development PX1 & PX2

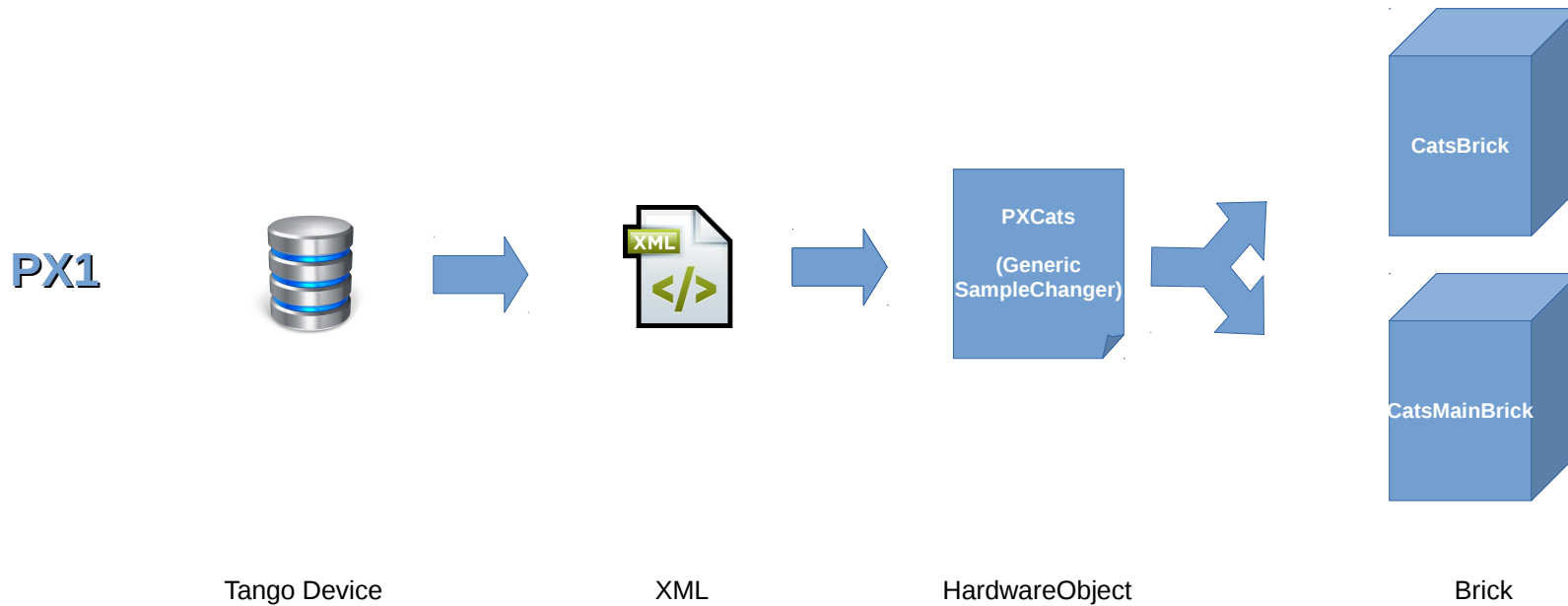
- Sample Changer Cats PX2





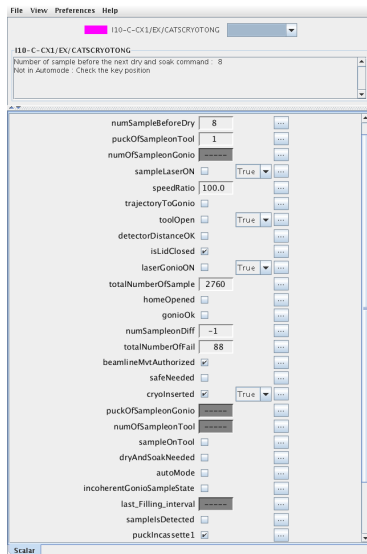
# Some Development PX1 & PX2

- Sample Changer Cats PX1



# Some Development PX1 & PX2

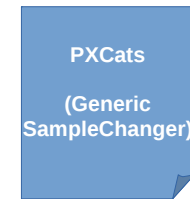
## - Sample Changer Cats PX1



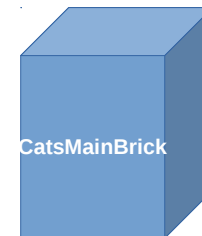
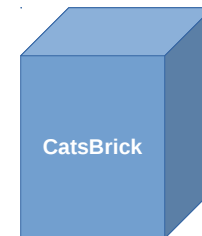
Tango Device



XML



HardwareObject



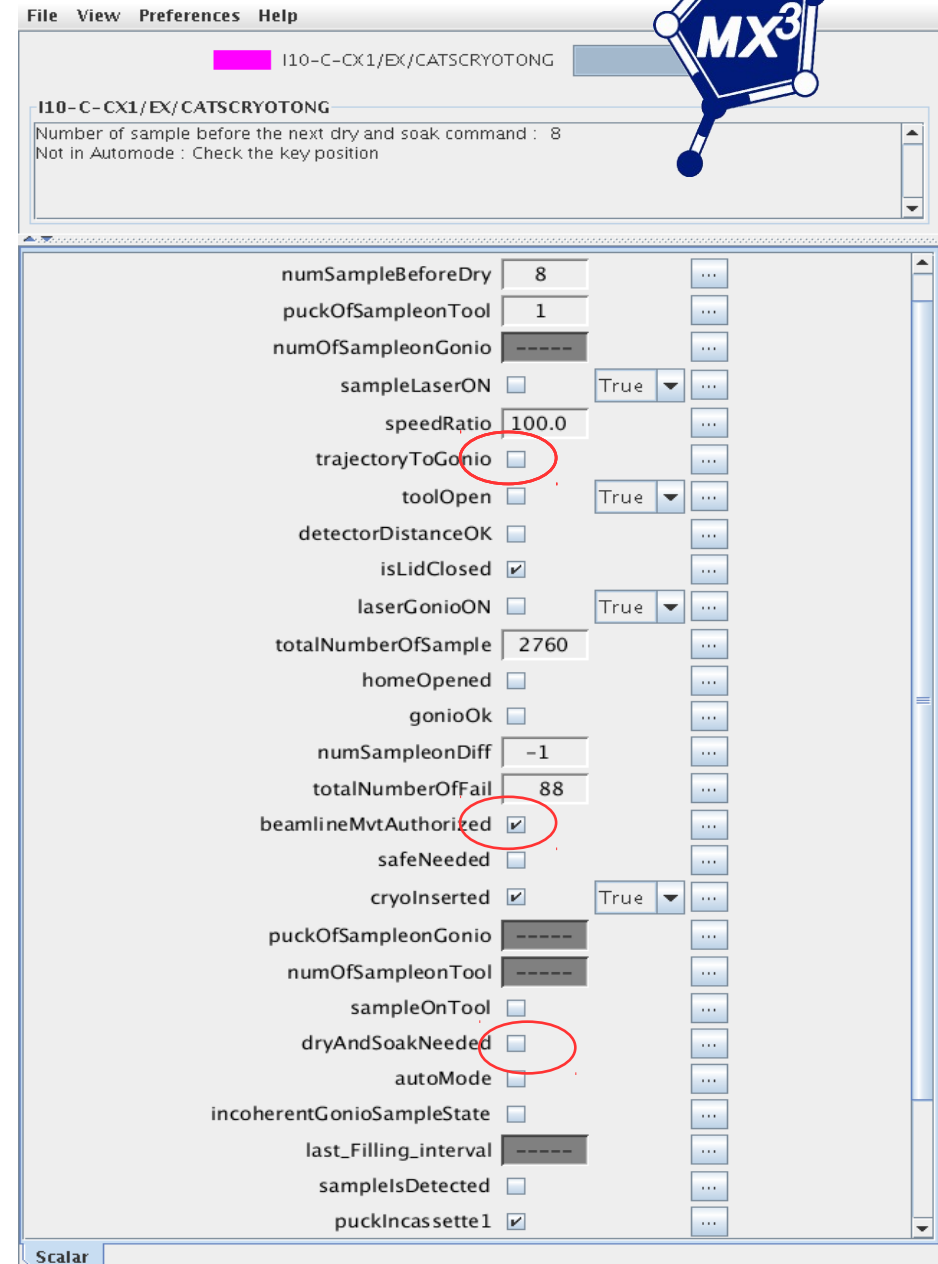
Brick



# CatsCryotong Device Tango

- Improve connection
- Collision management

Developed by Patrick Gourhant A.e. Proxima 1



The screenshot shows the MX3 control interface with the following configuration parameters:

Parameter	Value	Unit/Type
numSampleBeforeDry	8	Integer
puckOfSampleonTool	1	Integer
numOfSampleonGonio	-----	Integer
sampleLaserON	<input type="checkbox"/>	Boolean
speedRatio	100.0	Percentage
trajectoryToGonio	<input type="checkbox"/>	Boolean
toolOpen	<input type="checkbox"/>	Boolean
detectorDistanceOK	<input type="checkbox"/>	Boolean
isLidClosed	<input checked="" type="checkbox"/>	Boolean
laserGonioON	<input type="checkbox"/>	Boolean
totalNumberOfSample	2760	Integer
homeOpened	<input type="checkbox"/>	Boolean
gonioOk	<input type="checkbox"/>	Boolean
numSampleonDiff	-1	Integer
totalNumberOfFail	88	Integer
beamlineMvtAuthorized	<input checked="" type="checkbox"/>	Boolean
safeNeeded	<input type="checkbox"/>	Boolean
cryoInserted	<input checked="" type="checkbox"/>	Boolean
puckOfSampleonGonio	-----	Integer
numOfSampleonTool	-----	Integer
sampleOnTool	<input type="checkbox"/>	Boolean
dryAndSoakNeeded	<input type="checkbox"/>	Boolean
autoMode	<input type="checkbox"/>	Boolean
incoherentGonioSampleState	<input type="checkbox"/>	Boolean
last_Filling_interval	-----	Integer
samplesDetected	<input type="checkbox"/>	Boolean
puckIncas sette1	<input checked="" type="checkbox"/>	Boolean

## PX2 migration to QT4

- more friendly interface
- Leave Qub library.
- Develop easier with QT4 than QT3 on newer Linux releases.



## PX2 Implement MXCuBE v2.2 Qt4

Implement MXCuBE v2.2 Qt4 (improved graphical features)



## ACKNOWLEDGEMENT

- Bixente Rey
- Matias Guijarro
- Ivars Karpics