



# STATUS MXCuBE SOLEIL

# About me and MXCuBE



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Linden Malory



## About BEAMLINE 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**

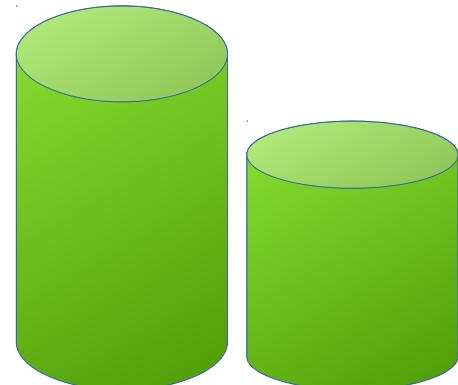


Energy range: 6-17 keV  
Beam size: 10x5  $\mu\text{m}^2$   
Speciality: Microcrystals  
Detector : **EIGER X 9M**  
Collect time : **less than 1 min.**  
Robot: **CATS-IRELEC** (9 Unipuck - 144 samples)  
Goniometer : **MD2**



## Status between PX1 and PX2

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



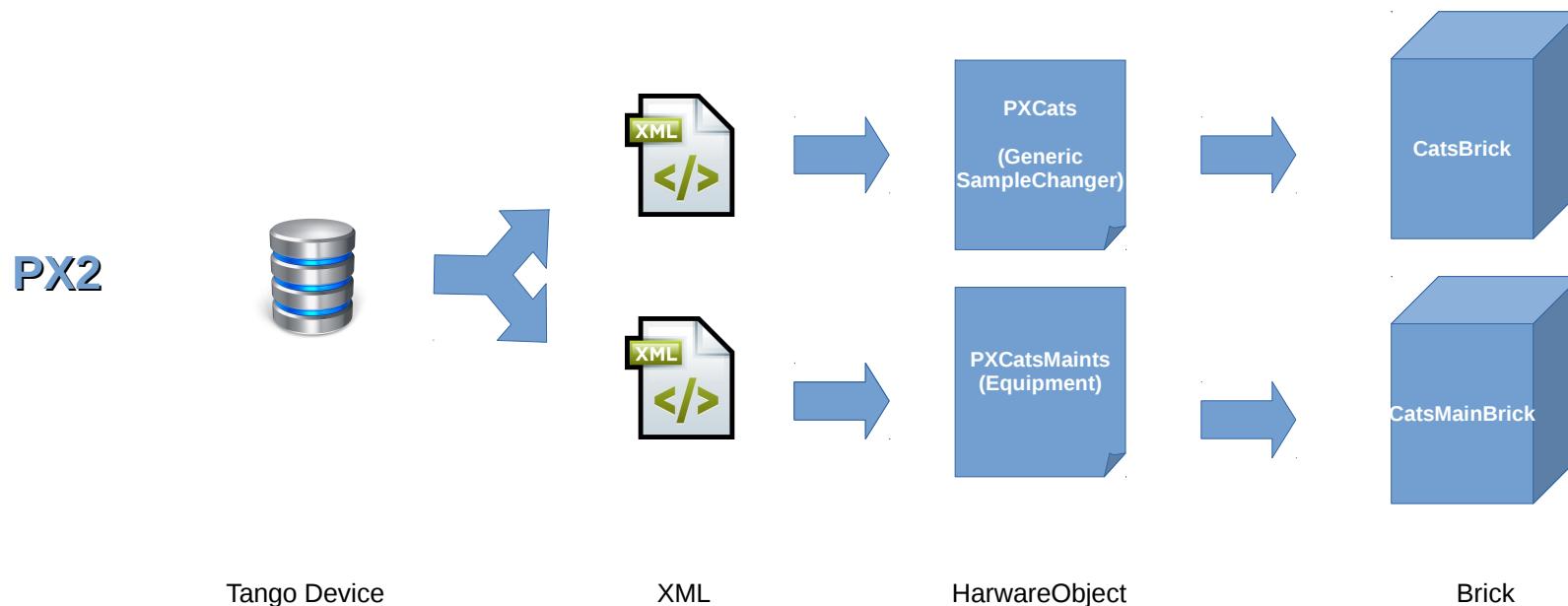


# Some Development PX1 & PX2

- Sample Changer Cats

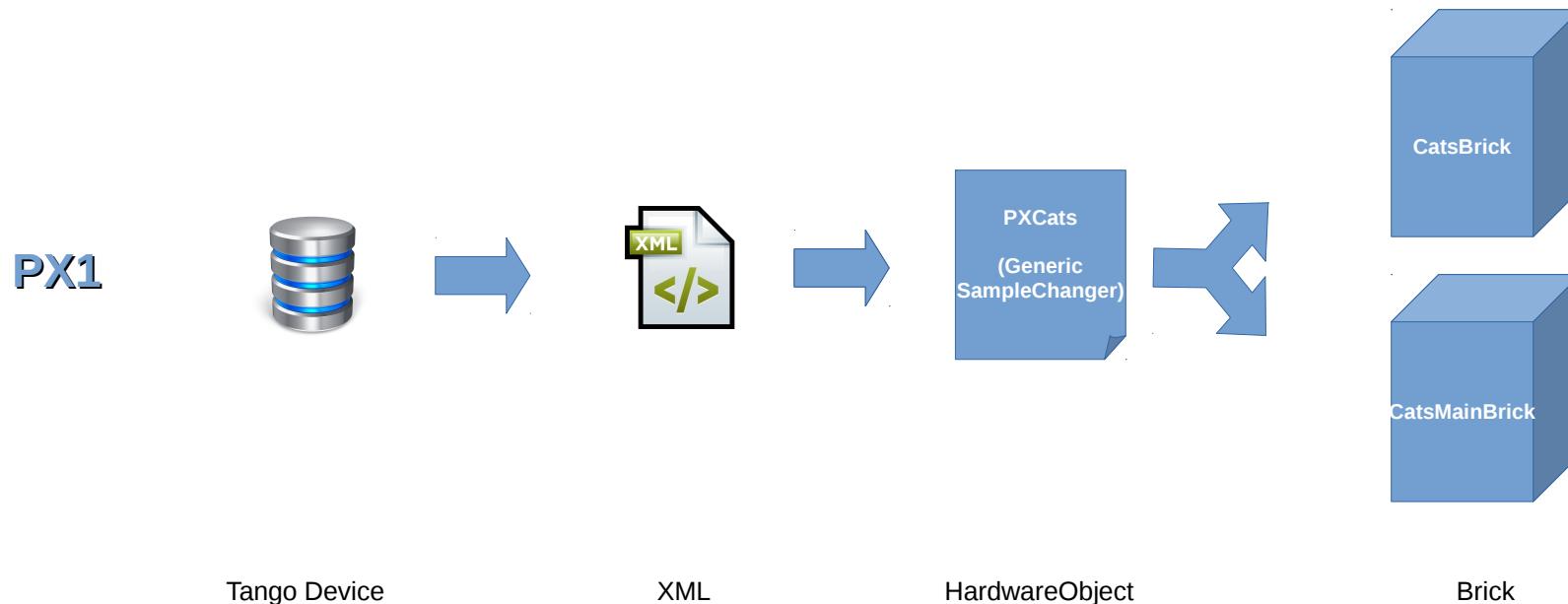
# Some Development PX1 & PX2

- Sample Changer Cats PX2



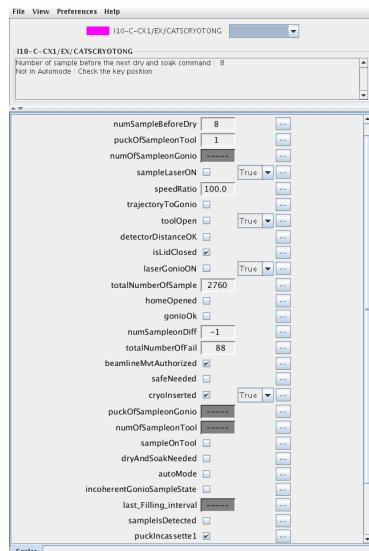
# Some Development PX1 & PX2

- Sample Changer Cats PX1



# Some Development PX1 & PX2

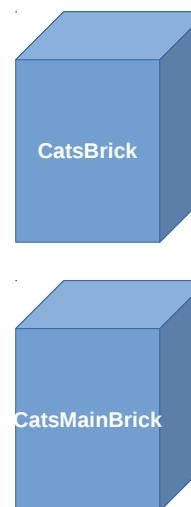
- Sample Changer Cats PX1



Tango Device

XML

HardwareObject



CatsBrick



Brick



# CatsCryotong Device Tango

- Improve connection
- Collision management

Developed by Patrick Gourhant A.e. Proxima 1

File View Preferences Help

I10-C-CX1/EX/CATSCRYOTONG

Number of sample before the next dry and soak command : 8  
Not in Automode : Check the key position

Scalar

numSampleBeforeDry	8
puckOfSampleonTool	1
numOfSampleonGonio	-----
sampleLaserON	<input type="checkbox"/>
speedRatio	100.0
trajectoryToGonio	<input type="checkbox"/>
toolOpen	<input type="checkbox"/>
detectorDistanceOK	<input type="checkbox"/>
isLidClosed	<input checked="" type="checkbox"/>
laserGonioON	<input type="checkbox"/>
totalNumberOfSample	2760
homeOpened	<input type="checkbox"/>
gonioOk	<input type="checkbox"/>
numSampleonDiff	-1
totalNumberOffail	88
beamlineMvtAuthorized	<input checked="" type="checkbox"/>
safeNeeded	<input type="checkbox"/>
cryoInserted	<input checked="" type="checkbox"/>
puckOfSampleonGonio	-----
numOfSampleonTool	-----
sampleOnTool	<input type="checkbox"/>
dryAndSoakNeeded	<input type="checkbox"/>
autoMode	<input type="checkbox"/>
incoherentGonioSampleState	<input type="checkbox"/>
last_Filling_interval	-----
sampleIsDetected	<input type="checkbox"/>
puckInCassette1	<input checked="" type="checkbox"/>



## 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
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