

# SEXAFS sample holder positions

Created 12/09/2011

Positions values are those displayed by the TANGO control system, not those on encoders or rulers

## 1 Transfert

Motor	Position
sx	9.00
sy	0.42
sz	165.85
sphi	-6ř

(Chambre de prep: 12.5 mm)

## 2 Bombardement Ionique

Angles are given for  $\pm 25^\circ$  incidence.

Motor	Position
sx	4.65
sy	8.00
sz	168.23
sphi	-95ř and 35ř

## 3 Auger

Motor	Position
sx	2.52
sy	-7.77
sz	7.33
sphi	104.0ř

## 4 Evaporators

### 4.1 First from fluorescence detector towards CMA100

Motor	Position
sx	4.42
sy	1.94
sz	170.0
sphi	148ř

### 4.2 Second from fluorescence detector towards CMA100

Motor	Position
sx	4.42
sy	1.94
sz	170.0
sphi	178ř

## 5 Tournevis plaque FLUO

Motor	Position
sx	5.50
sy	7.77
sz	47.25
sphi	-18ř

## 6 LEED

Vieilles positions à modifier!!!!!!!!!!

x=0 mm

y=0 mm

z  $\approx$  15mm

$$\theta = 222 - 223 \hat{A}^\circ$$

## 7 Balance

The balance is 180ř from the sample,  
65 mm atop and 18mm closer to the evaporators.

Motor	Position
sx	4.42
sy	1.94
sz	105.06
sphi	evap-180ř

## 8 X-rays normal and grazing

The sample thickness plays an important role when working at grazing incidence: be careful aligning sample in grazing incidence.

### 8.1 Normal position

In the normal position or “parallel orientation” the sample faces the x-ray beam and the electric field lies parallel to its surface.

The sample faces the beam at -77ř.

Motor	Position
sx	9
sy	4
sz	10.63
sphi	-77ř-”Angle to beam”(0 to 20ř)

### 8.2 Grazing position

In the grazing position or “perpendicular orientation” the electric field lies perpendicular to the sample surface, the sample surface is then close to parallel to the x-rays path.

The sample faces the beam at -77ř.

Motor	Position
sx	9
sy	5.90 (to be refined)
sz	10.63
sphi	-167ř+”Angle to beam”(0 to 20ř)