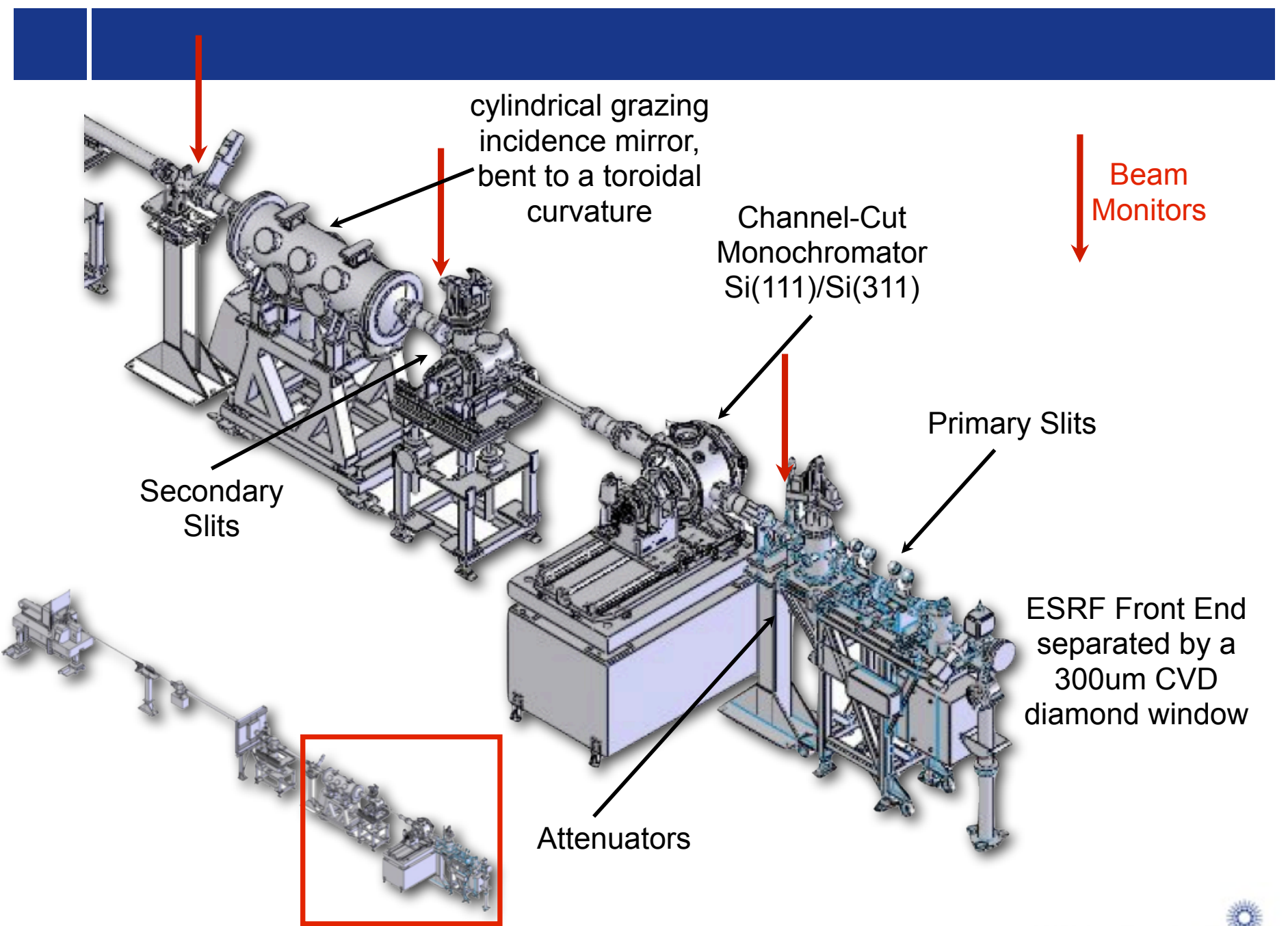




**ESRF**

| The European Synchrotron

1D29



cylindrical grazing incidence mirror, bent to a toroidal curvature

Channel-Cut Monochromator Si(111)/Si(311)

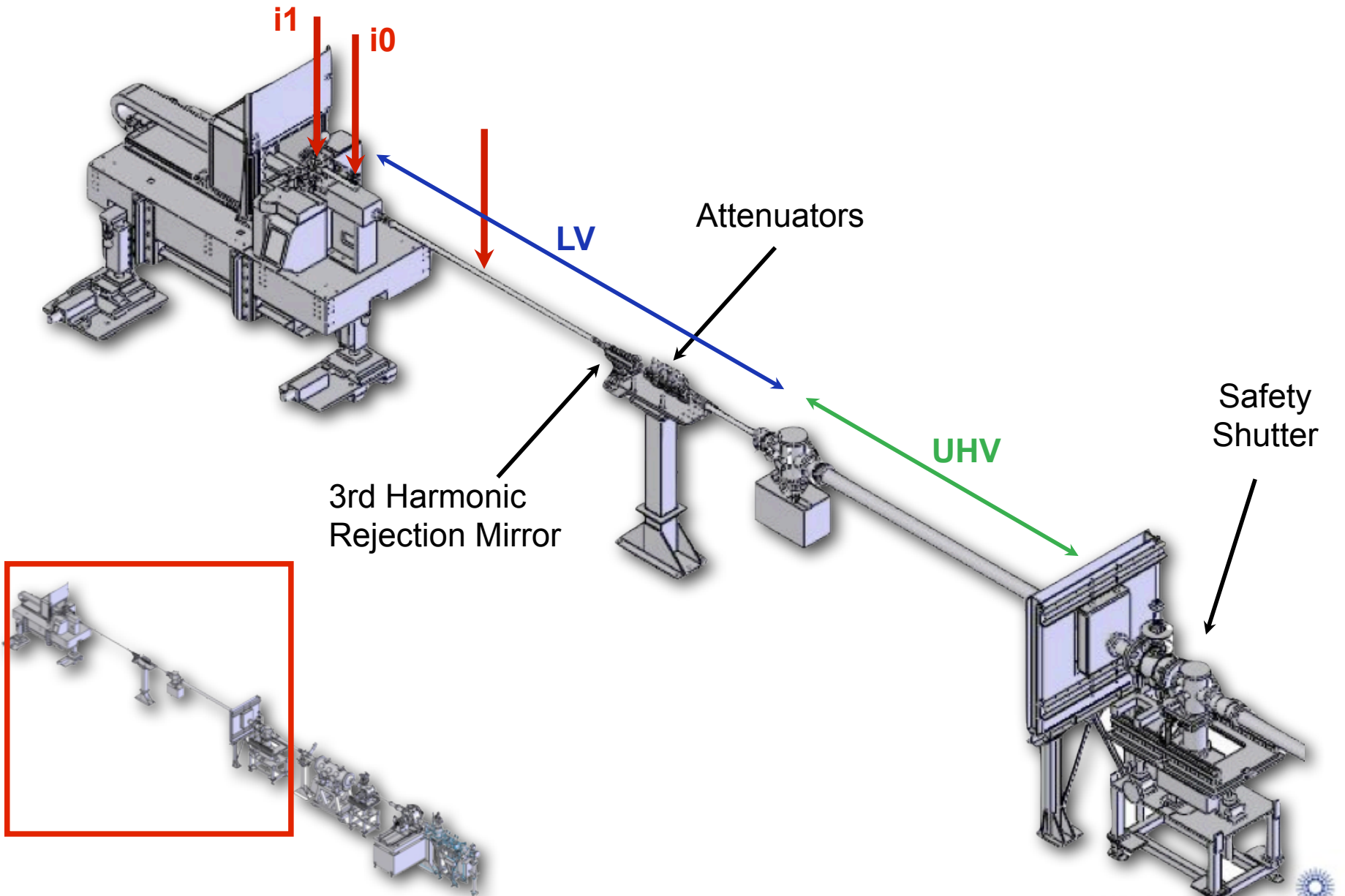
Beam Monitors

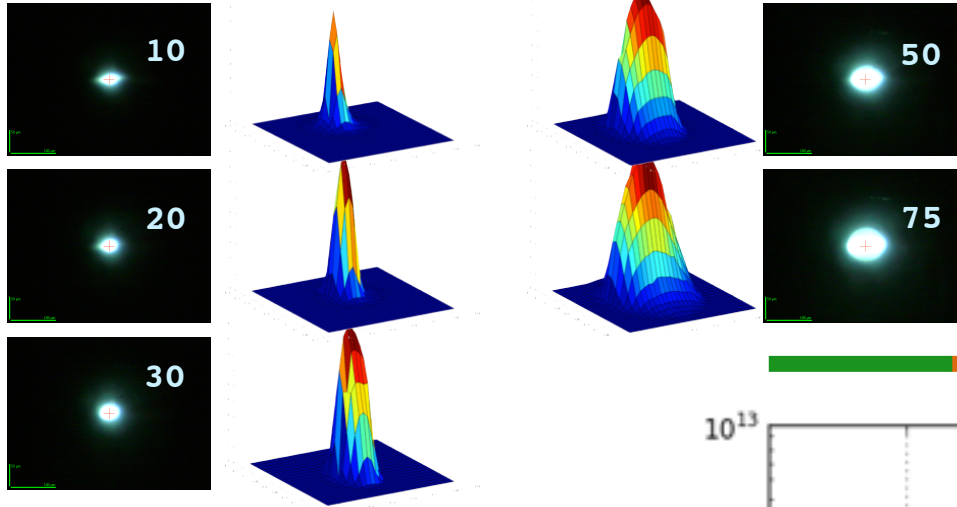
Secondary Slits

Primary Slits

ESRF Front End separated by a 300um CVD diamond window

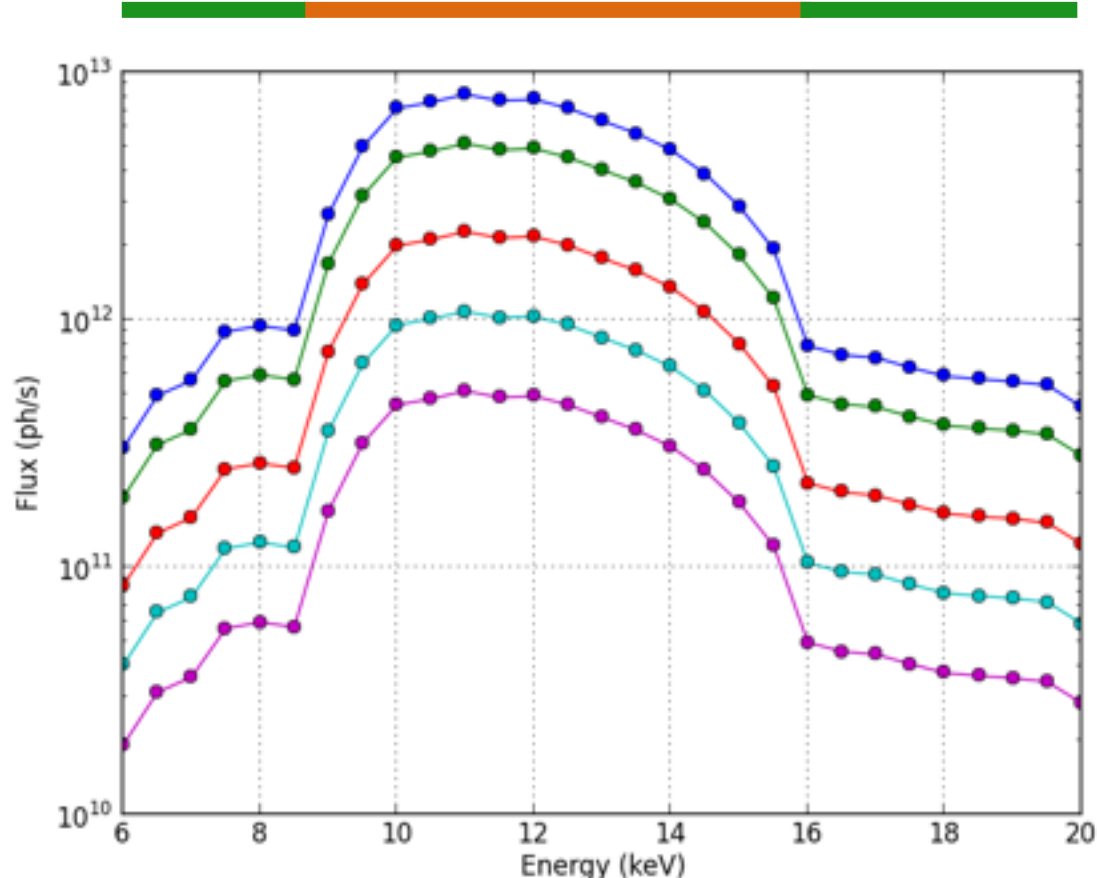
Attenuators





Beam focused at 50x30  $\mu\text{m}$   
 Resizable beam-size with apertures

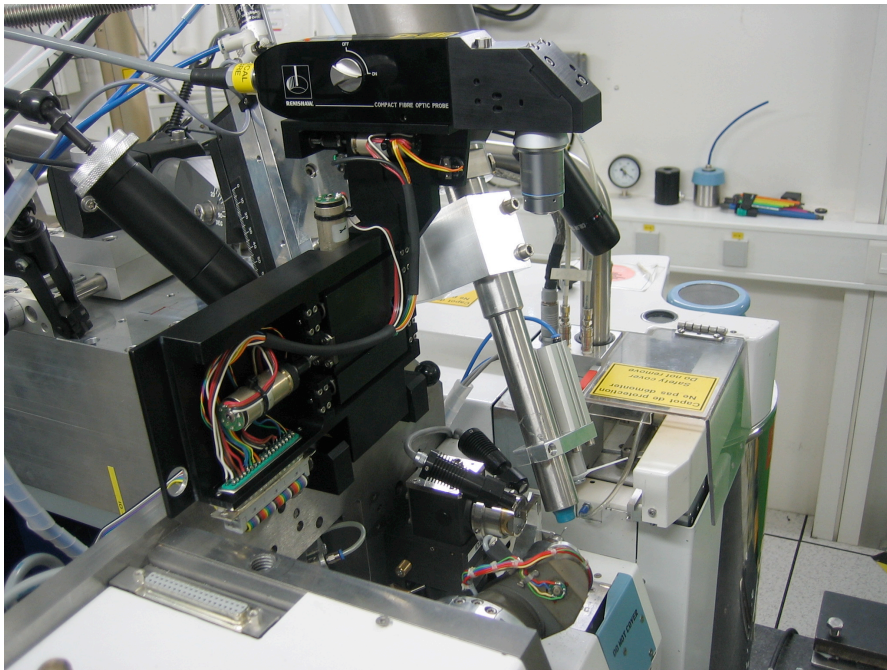
Microbeam applications  
 Fast meshes  
 Helical  
 microXtallography



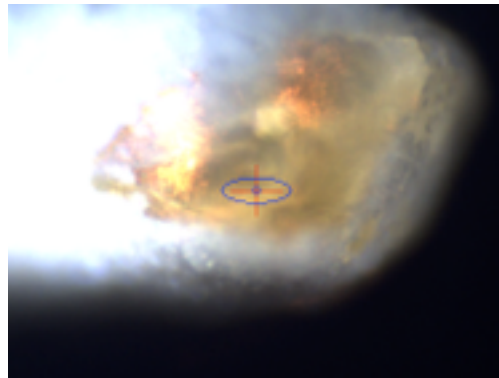
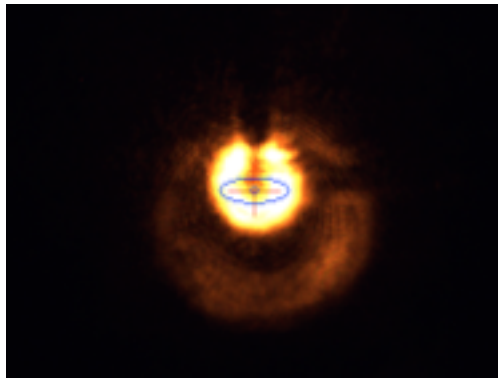
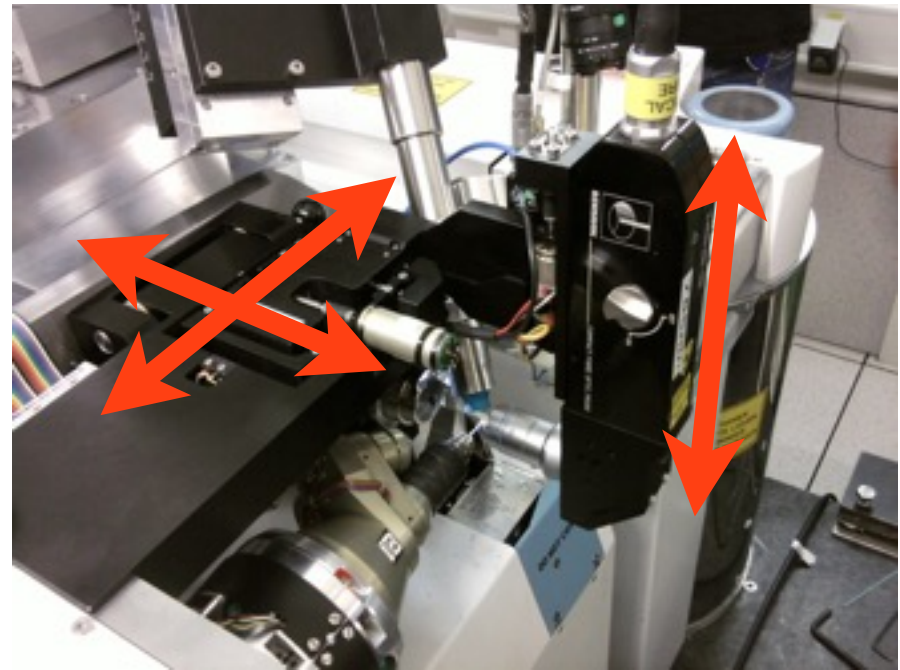


# SPECIAL SETUP

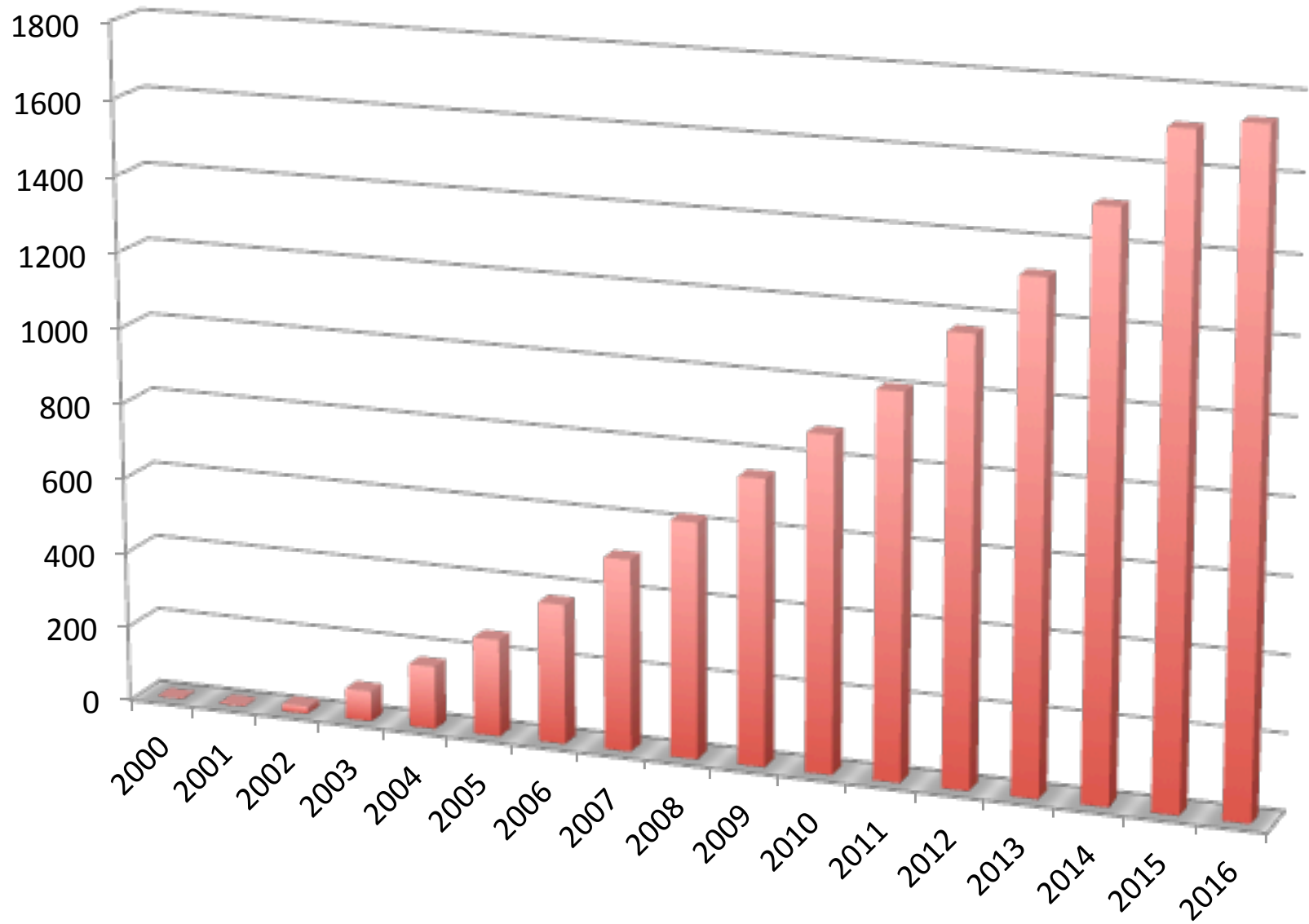
## Probe out - Diffraction data collection



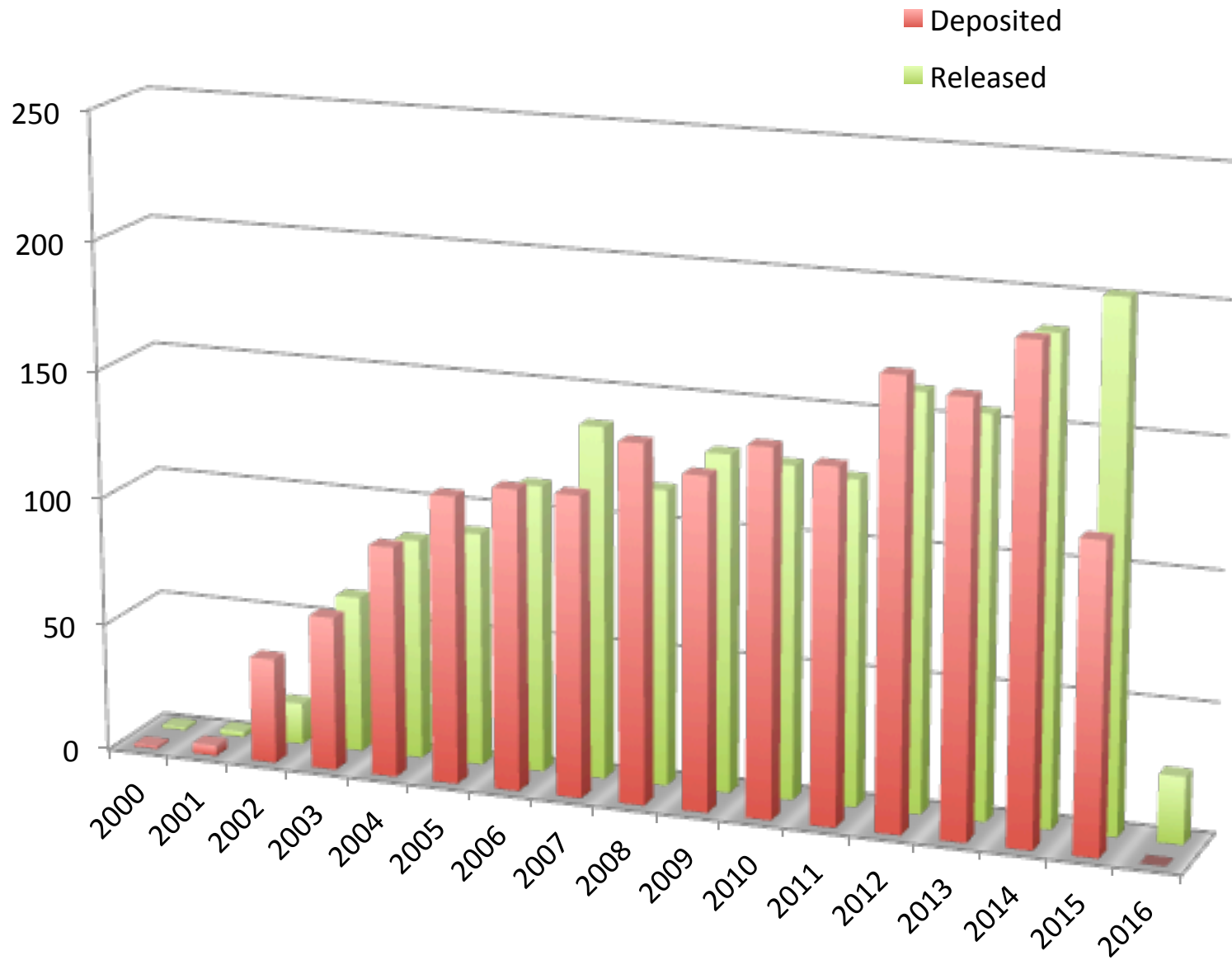
## Probe in - Record Raman spectra



# TOTAL PDB DEPOSITED



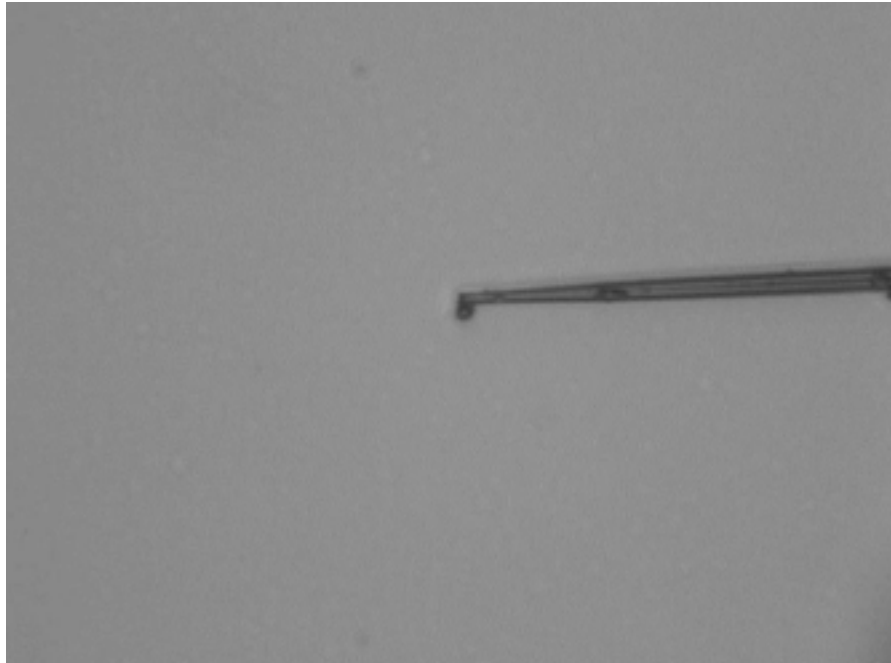
# DEPOSITION PER YEAR



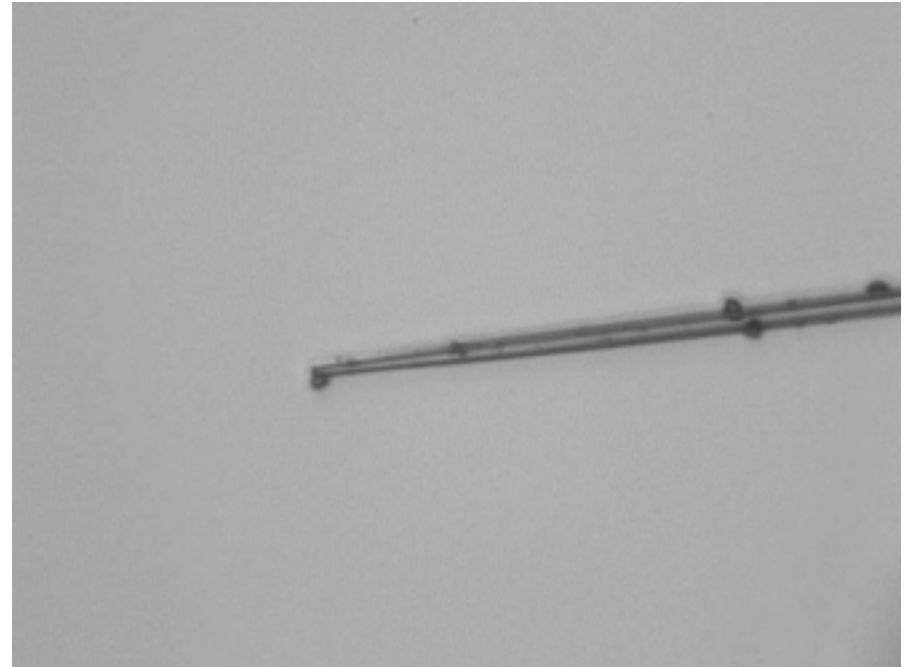


- Maintenance of OAV
  - Cleaning and replacement parts
- Upgrade to new control software for motors in EH
  - No more Spec (blue window)
  - Bliss - in principle accessible and needed only by LC

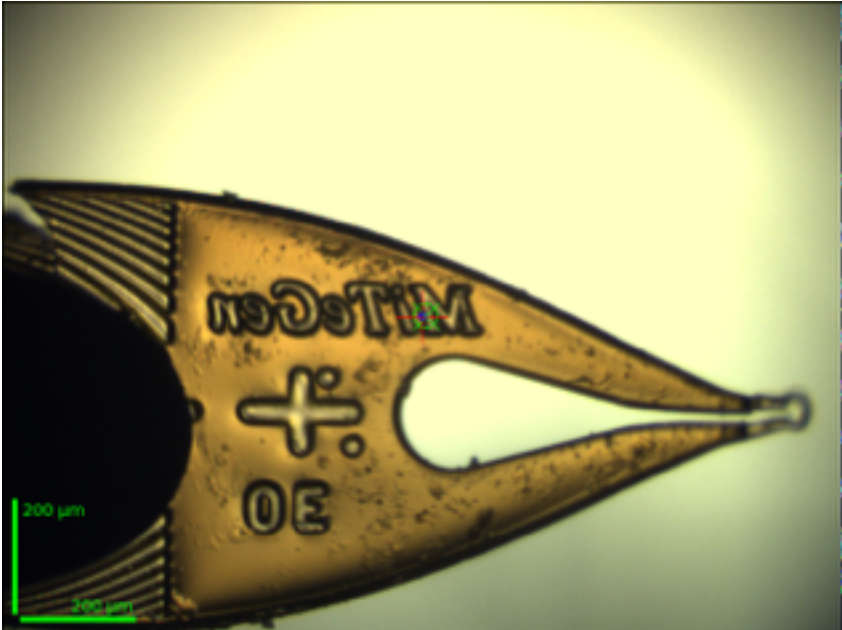
**Before**



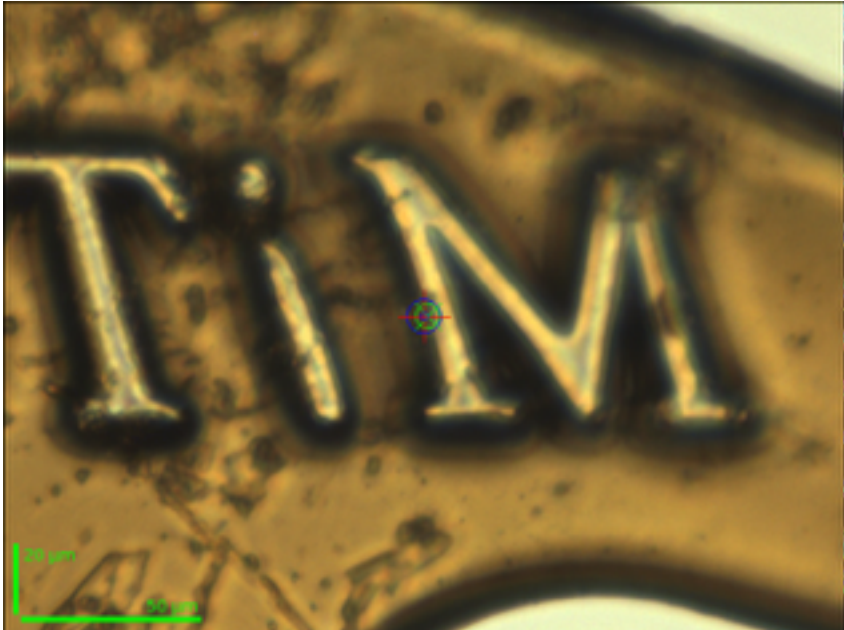
**After**

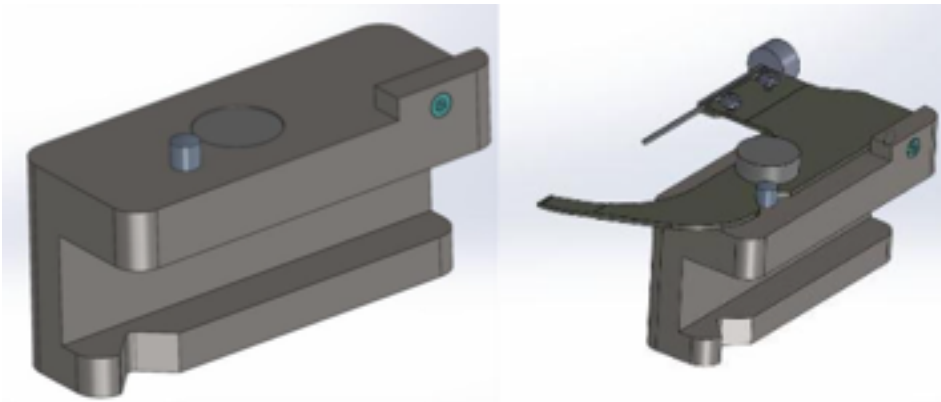
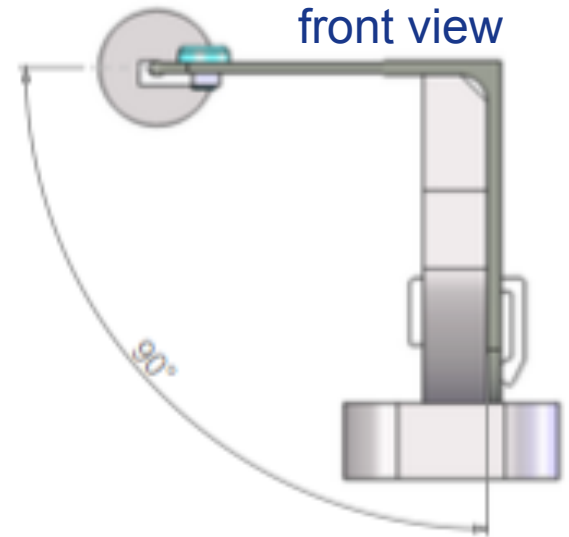
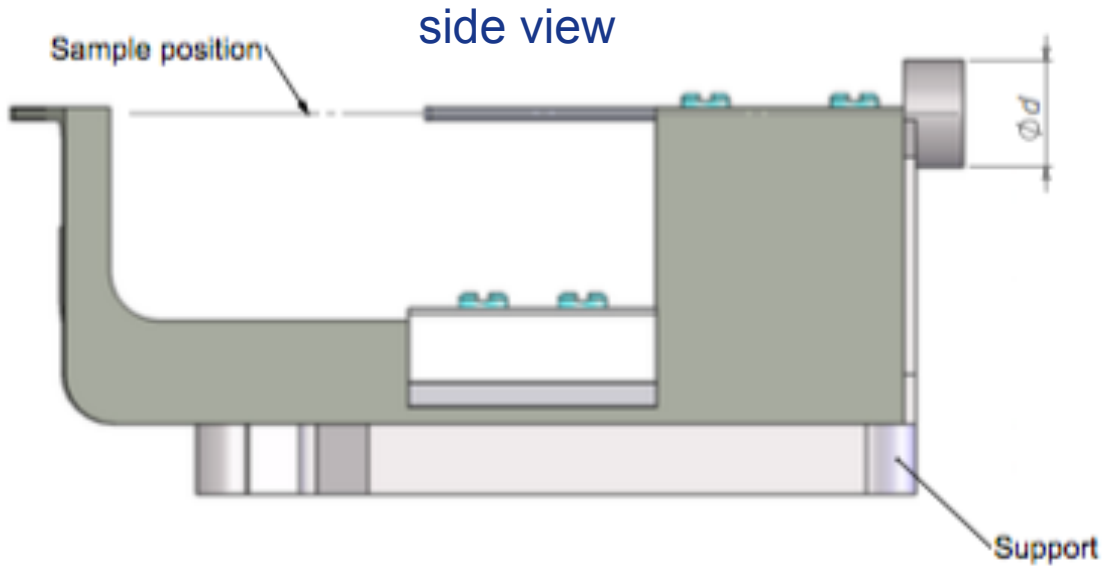


Zoom 3

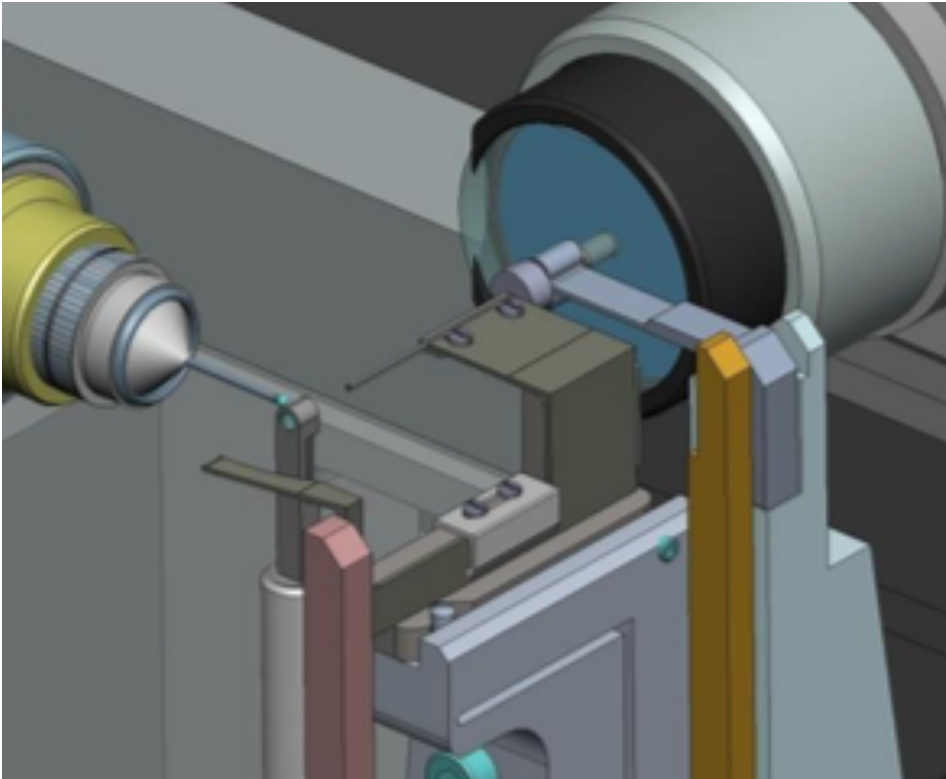


Zoom 10

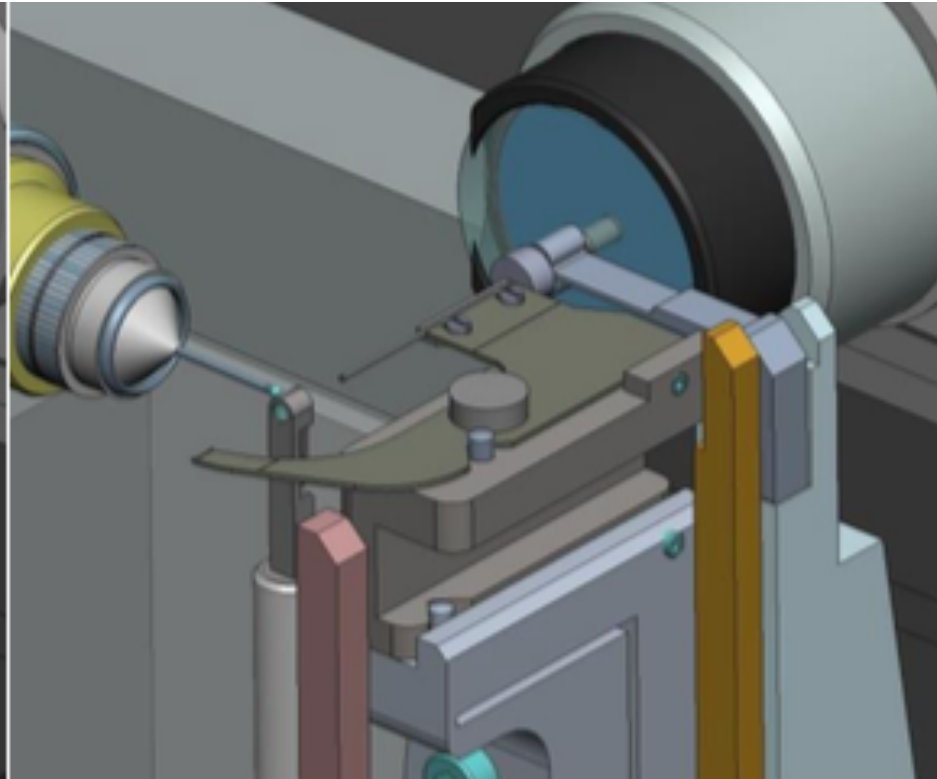




## Adapter piece - easy swap between two beamstops

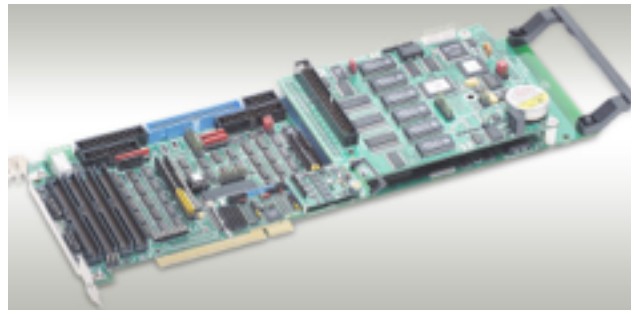
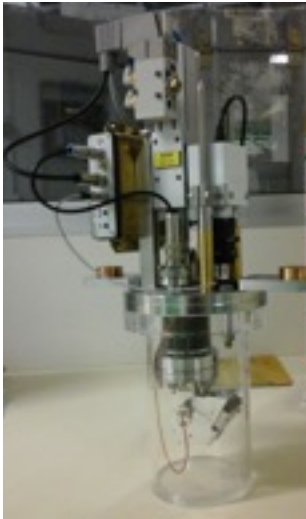


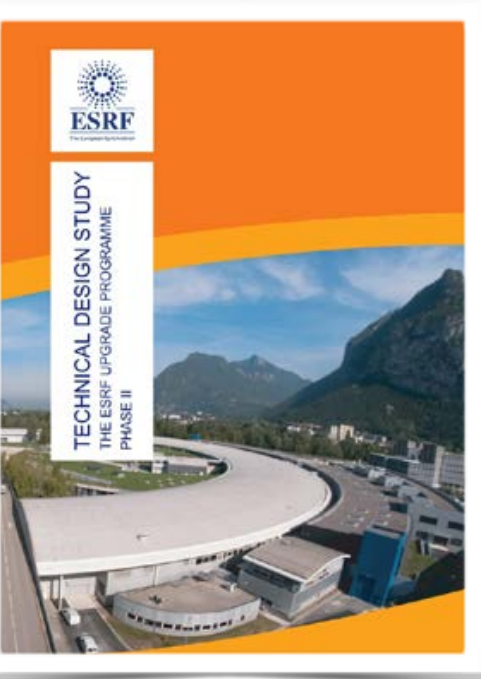
90 deg beamstop



classic beamstop

- Replacement of beam monitors after mirror (in OH)
- Replacement of slitbox (in EH) with commissioning of new XBPM
- Upgrade of PMAC CPU card to 240 MHz
- ...





	Current	New lattice	New lattice (50:1)
Source size (um2)	59 x 8.3	27.2 x 3.4	27.2 x 3.4
Divergence (urad2)	107 x 3	5.2 x 1.4	5.2 x 1.4
Demagnification	3:1	3:1	50:1
Beamsize @ sample (um2)	50 x 30	8 x 2	0.5 x 0.1
Flux @ sample (ph/s)	$1 \times 10^{13}$	$1 \times 10^{14}$	$1 \times 10^{14}$
Flux density @ sample (ph/s/um2)	$6.6 \times 10^9$	$8 \times 10^{12}$	$2 \times 10^{15}$

<http://www.esrf.eu/home/about/upgrade/ESRF-EBS-call-expressions-of-interest.html>