MASSIF-3

Beam line characteristics

- BL:
  - Fixed energy (12.81 keV), side diffractiong Si111 monochromator (LN2 cooled)
  - Moderate µ-focus (~ 15µm diam)
  - High flux (~ $1.5.10^{13}$ ph/s)

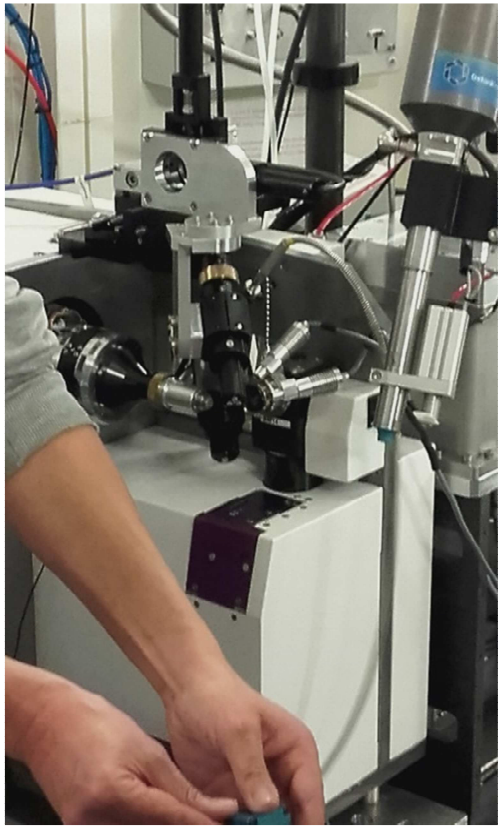
- Exp setup:
  - MD2 (from BM14)
  - Flex HCD (unipuck + SC3 pucks)
  - Eiger 4M detector (up to 750 Hz frame rate, 75x75 μm^2, 155.2x162.5 mm^2)
  - Best resolution : 1.52 Å

Developments

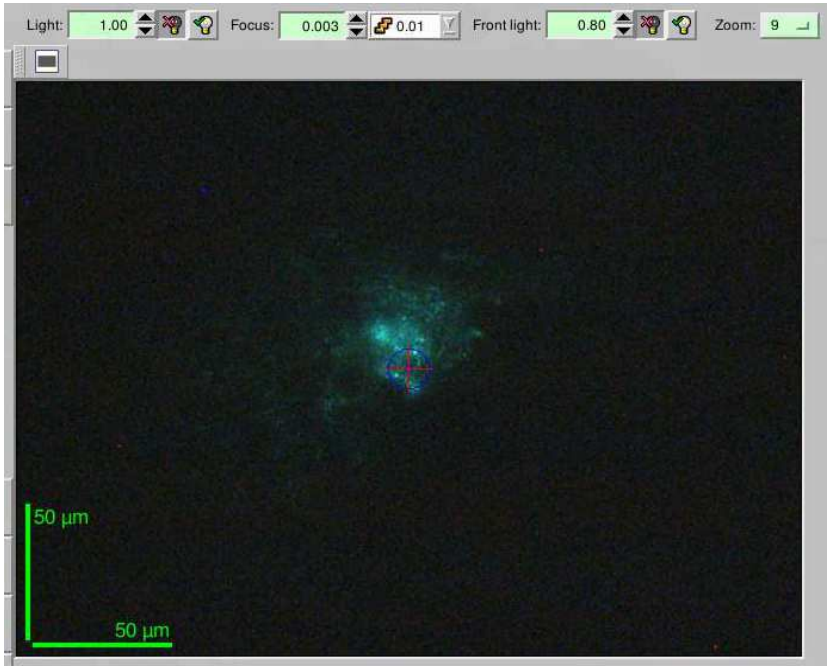
- Fast meshes
- Automatic data collection workflows
- Test bench for jet flow experiments
- Moveable beam stop along beam direction, allowing larger accessible volume at sample position (microfluidics, etc…)

- Future:
  - Fast omega rotation (up to 720 deg/s) in March
  - mxCuBE3 probably in March (requires new control PC installation
  - MicrospecNG (compatible with microdiff MD2)

MicrospecNG (D. Von Stetten, O. Hignette, P. Theveneau)



- screenshot (with a green LED light source)
- motorized alignment along the light path for focussing onto the sample
- focus size seems ~ 25 µm,



Acknowledgements

- **David Von Stetten**, Philippe Carpentier
- Pascal Theveneau

- Hugo Caserotto, Fabien Dobias, Thierry Giraud, Mario Lentini, John Surr (SB Techs)
- Jeremy Sinoir, EMBL instrumentation group
- Mathias Guijarro, Antonia Beteva (BCU), Olof Svensson, Alejandro de Maria,
- SB group
- Gordon Leonard, Christoph Mueller-Dieckmann