NEWS FOR BEAMLINE ID01

Tobias Schulli

ESRF – Grenoble, France

The significant progress made combining real space methods (Atomic Force microscopy AFM) and micro/nano-diffraction is defining the requirements for a beamline being specialized on the use of small beams, beam coherence and a diffraction setup. The mid-term developments will have to address the implementation of the existing sample environments as furnaces and AFM in the new micro-diffractometer which has been ordered for the end of 2010. In parallel to the further development of the microfocusing optics, the definition and construction of novel sample environments, answering the specific requirements of nanobeams seems to be of outmost importance. In a short review, recent achievements in nano-imaging by coherent x-ray diffraction and x-ray diffraction microscopy in combination with AFM are presented concluding on the main axes of evolution of the instrument.