

## **Nano-focussing and nano-imaging at the ESRF: long-term perspectives?**

Jean Susini

*X-ray Imaging Group, Experiments Division, ESRF, Grenoble, France*

The micro-analysis techniques follow the evident trend in the development of nano-technologies by pushing further spatial resolution. Considering the concomitant developments of laboratory instruments and dedicated synchrotron beam lines worldwide, a very competitive context can be anticipated for the coming years. In this environment, synchrotron based analytical techniques (diffraction, imaging and spectro-microscopies) will play an important role by offering unique capabilities (3D information, time-resolved, chemically selective,...). The 10 year experience of the ESRF in developing instruments with micron or sub-micron lateral resolution shall be used as the foundation of upcoming new nanoprobes programs. The main issues involved in such long-term program will be addressed and when possible discussed.