RECENT NEWS FROM THE COMMISSIONING OF SWING, THE SAXS & WAXS BEAMLINE AT SOLEIL

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SWING is a beamline devoted to (A)SAXS, WAXS and (A)GISAXS at SOLEIL, opened to all scientific domains with no exclusion. A large motorized table allows for fine positioning of sample environments, even bulky. The CCD detector is positioned on a three axes translation stage within a large chamber under primary vacuum. The sample to detector distance ranges from 0.6 to 8 m. The source is an in-vacuum undulator, thus providing with a beam with small size and low divergence. Focusing of the beam onto the detector plane is possible by bending two perpendicular mirrors (Kirckpatrick Baez configuration), thus being insensitive to a change in energy. The size of the focused beam should be typically 400 µm x 100 µm (HWHM). The range of easily accessible energies is 5-17 keV (2 Si111 crystals monochromator), with an expected flux of about 10^{13} photons/s. A friendly graphical interface written in Java allows for collection and online data reduction, including automated determination of radius of gyration, peak maximum intensity and width, etc. Dedicated sample environments for biology, soft condensed matter and GISAXS will be available. The beamline is presently under assembly and the optics under commissioning. It is expected that some experimental measurements will come out and be shown at the date of the workshop.