Beam at all End-Stations in the Brockhouse Beamlines at the Canadian Light Source

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Three new hard x-ray beamlines, built within the Brockhouse Sector project, are under commissioning at the Canadian Light Source. The beamlines are dedicated to diffraction and scattering experiments for materials science. By August 2019 during the Denver Conference, the synchrotron beams are expected to reach all the end-stations. In this presentation, we will provide an update of the current state of the Brockhouse Sector beamlines, outline design features and report on the new capabilities available for users.

Two of the Brockhouse beamlines share an in-vacuum wiggler source, while the third beamline has an in-vacuum undulator source. Together the beamlines cover an energy range from 5 to 90 keV. The wiggler beamlines are in an advanced commissioning stage, and we already have collected high quality data in the four different stations: small molecule crystallography, high-resolution powder diffraction, pair distribution function, and in-situ rapid thermal annealing.

The undulator beamline will be conditioned and aligned during the summer 2019. This beamline has a Newport Kappa diffractometer station that will be dedicated mainly to single crystal and thin films diffraction experiments. All three beamlines will be receiving Letter of Intent proposals in the second half of 2019.