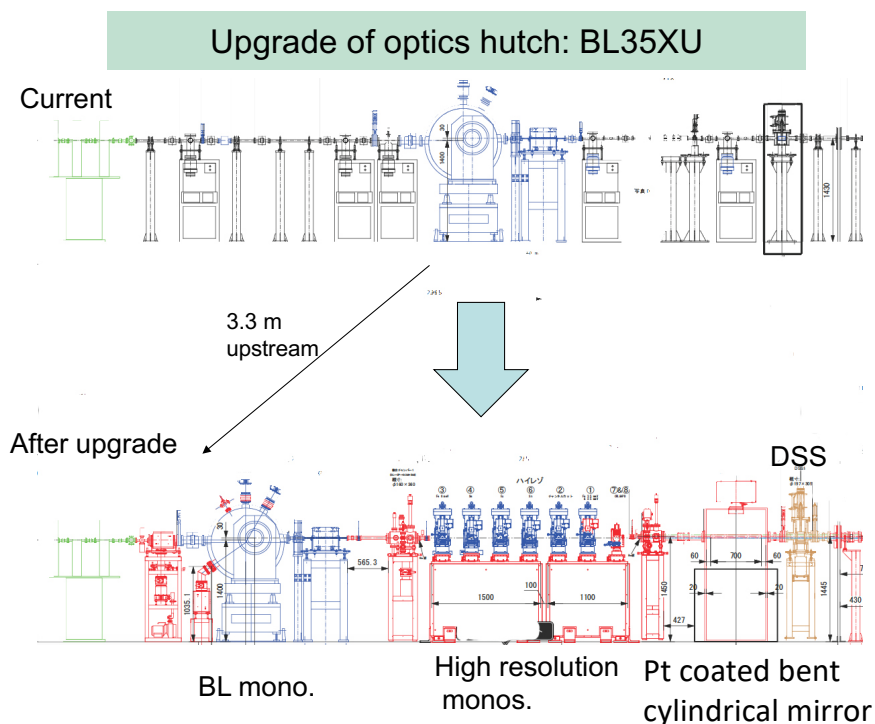


Overview of the JASRI NRS Program at SPring-8

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NRS is one of the longest running scientific programs at SPring-8, with activities first primarily at BL09XU and then branching out to other beamlines, including BL19LXU which uses a 25m ID to provide high intensity. Work at BL09XU has included (1) synchrotron Mössbauer spectroscopy in the energy and time domains, (2) nuclear inelastic scattering (NIS), (3) quasi-elastic scattering (QES), and (4) nuclear excitation for fundamental physics, while work at BL19LXU focusses mostly on spectroscopy of biological materials and, recently, the excitation of the ²²⁹Th resonance. Examples will be given in the subsequent talks. In 2019 SPring-8 began the process of moving the BL09XU NRS program would move to BL35XU, while BL09XU would become 100% devoted to HAXPES (BL09XU had previously been about 50% HAXPES). BL35XU, having a specialized short period ID will offer higher flux at energies ≥ 14.4 keV (except for a dead region between 28 and 42 keV), Other changes will include a flexible and robust set of high resolution monochromators that are easily inserted/removed from the beam, and Pt-coated cylindrical mirror for focusing over a wide energy range. The NRS Program at BL35XU is scheduled to open for public use in October of 2021.



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