

Motorized Slits for Macromolecular Crystallography Beamlines

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MacCHESS currently uses pin-hole collimators to produce a 100 micron diameter x-ray beam for protein crystallography. We would like to evaluate the use of motorized slits in place of apertures. This would involve collecting protein diffraction datasets on beamline F2 for comparison with and without slits. It also involves evaluating and modeling of sources for background scatter such as slits, apertures, and air in the beam path and determining a scheme for automatic alignment of slit blades to maximize flux.