Hybrid Spectrometer BL15 [BNL]
Conceptual Design

- Target Monolith
- Instrument Building Floor
- Instrument Shielding 14’ Tall x 14’ Wide
- Instrument Building Wall
Hybrid Spectrometer BL15 [BNL]
Conceptual Design

- Removable Block Shielding
- Poured In Place Temporary Shielding
- Poured In Place Permanent Shielding
- Block Wall Shielding
- Access Door
Hybrid Spectrometer BL15 [BNL]
Conceptual Design

- Poured In Place Permanent Shielding
- T(0) Chopper
- Disk Chopper
- Monochromator
- Goniometer
- Radial Collimator
- Vacuum Flight Chamber and Detectors
Hybrid Spectrometer BL15 [BNL]
Conceptual Design

- Automated Shutter System for Monochrometer
- Dual Worm Drive Lifts
- Shutters, Each at 5 Degree Increments
- Counter Rotating Disk Chopper
Hybrid Spectrometer BL15 [BNL]
Conceptual Design

- Shutters have Offset Surfaces to Stop Unwanted Scattering
- Shutters “Ride” Independently On Two Screws
- Access to Monochrometer
Hybrid Spectrometer BL15 [BNL]
Conceptual Design

1. Raise Shutters

2. Swing Sample and Detectors On Airpads

3. Close Shutters
Hybrid Spectrometer BL15 [BNL]
Conceptual Design

- Moderator Assembly
- Guide 1m from Moderator (highlighted in red)
- Core Vessel Insert
- Main Beamline Shutter
- Shutter Guides
Hybrid Spectrometer BL15 [BNL]
Conceptual Design

- Typical Experiment Configuration