

GM/CA CAT

National Institute of General Medical Sciences and National Cancer Institute
Collaborative Access Team

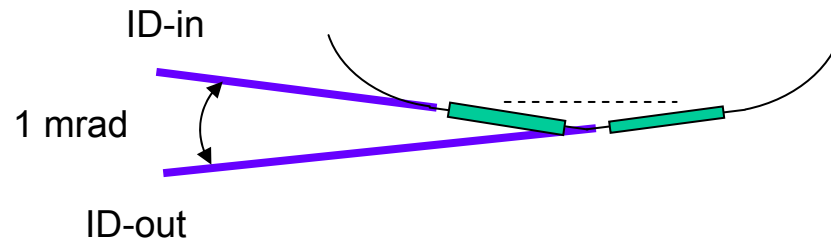


Dual Undulator Beamlines from One Straight Section

Typical Single Undulator



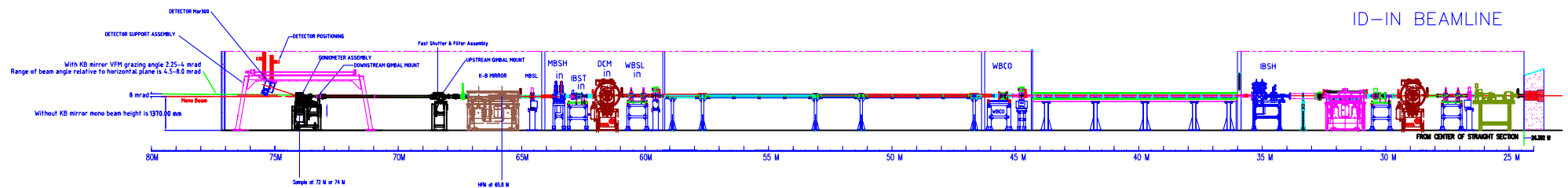
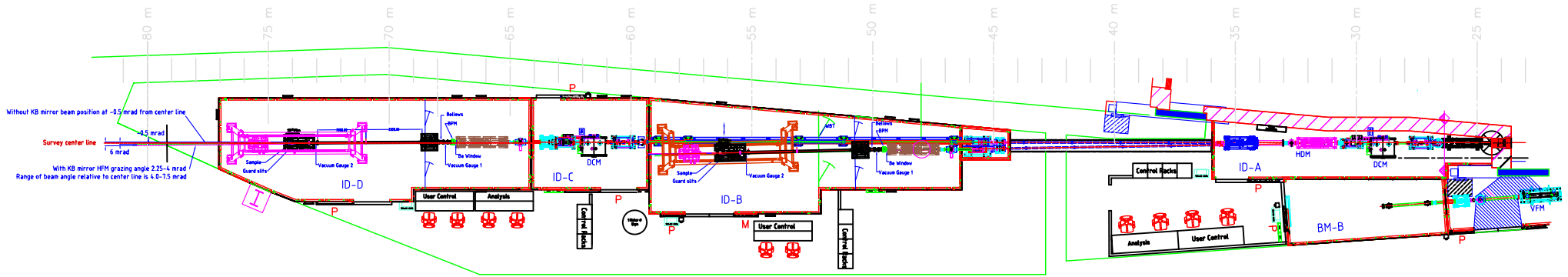
Dual "Canted" Undulators



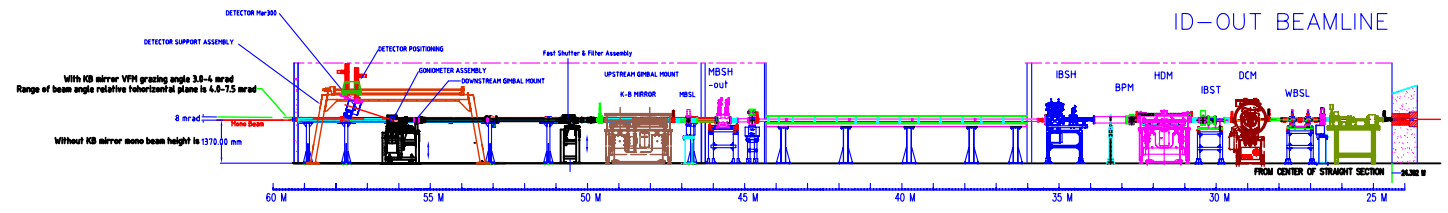
Beamline Design Specifications

	ID-out, ID-in		BM	
Energy Range (keV)	3.5 - 20, 3.5 - 35		3.5 - 35	
Energy Resolution (% , for all energies)	<0.02		<0.02	
Flux @12 keV (photons/s/100 mA/0.02% BW)	> 1.0 x 10 ¹³		> 1.0 x 10 ¹¹	
Harmonic contamination (%)	<0.01		<0.01	
Rate of energy change (eV/sec) at 6.5 keV	350		350	
at 20 keV	3500		3500	
Beam positional stability for 100 eV change (% of beam size)	<5		<5	
Beam positional stability for 1000 eV change (% of beam size)	<10		<10	
	Vert	Hor	Vert	Hor
Beam size at crystal (microns)	50	200	100	200
Beam divergence at crystal (mrad)	0.05	0.25	0.25	2.0

GM/CA CAT Beamlines Layout



ID-IN BEAMLINE



ID-OUT BEAMLINE