Moving Optics

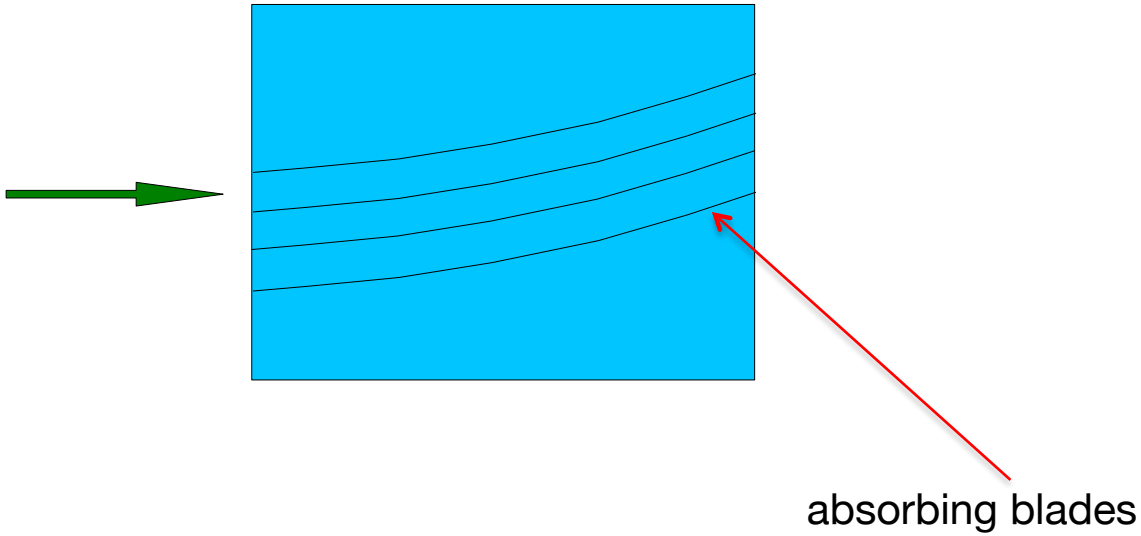
- Velocity selector
- Disk Chopper
- Fermi Chopper

Velocity Selectors

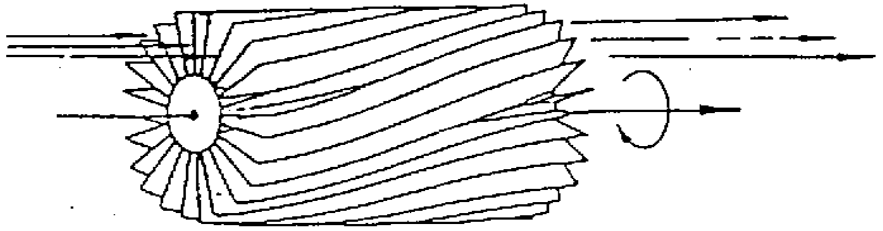
-

Select the neutron energy you want

VELOCITY SELECTORS

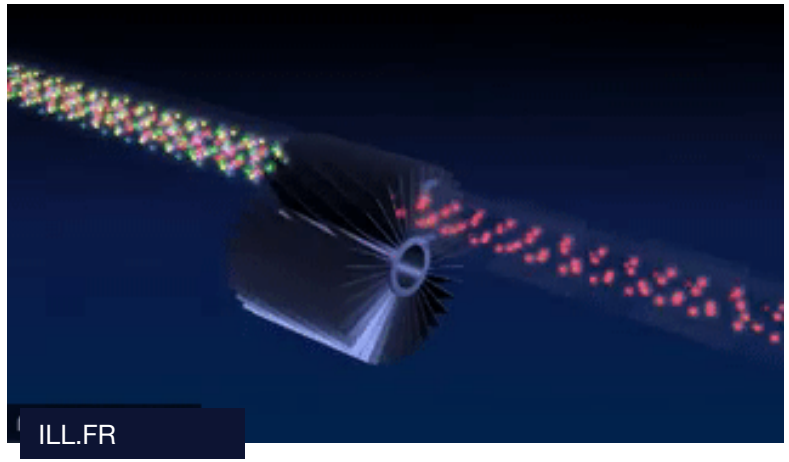


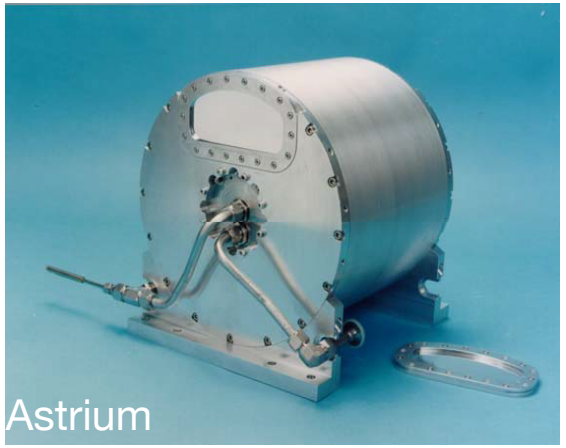
VELOCITY SELECTORS



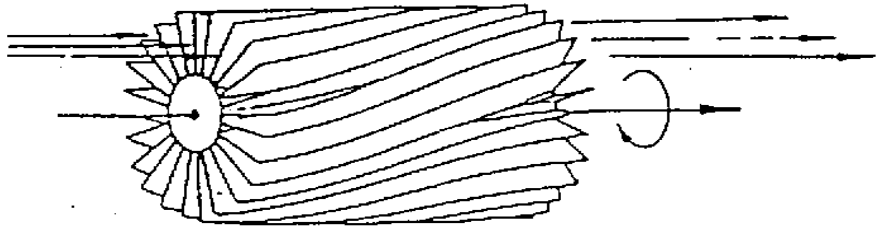
VELOCITY SELECTORS

‘broad’ monochromatization $\delta\lambda/\lambda \approx 10\ \%$





VELOCITY SELECTORS



INPUT PARAMETER

xwidth	[m]		width entry aperture
yheight	[m]		height entry aperture
zdepth	[m]		housing! length
length	[m]		blade length
d		[m]	blade thickness
alpha	[deg]		twisting angle
radius	[m]		distance rotation axis – aperture centre

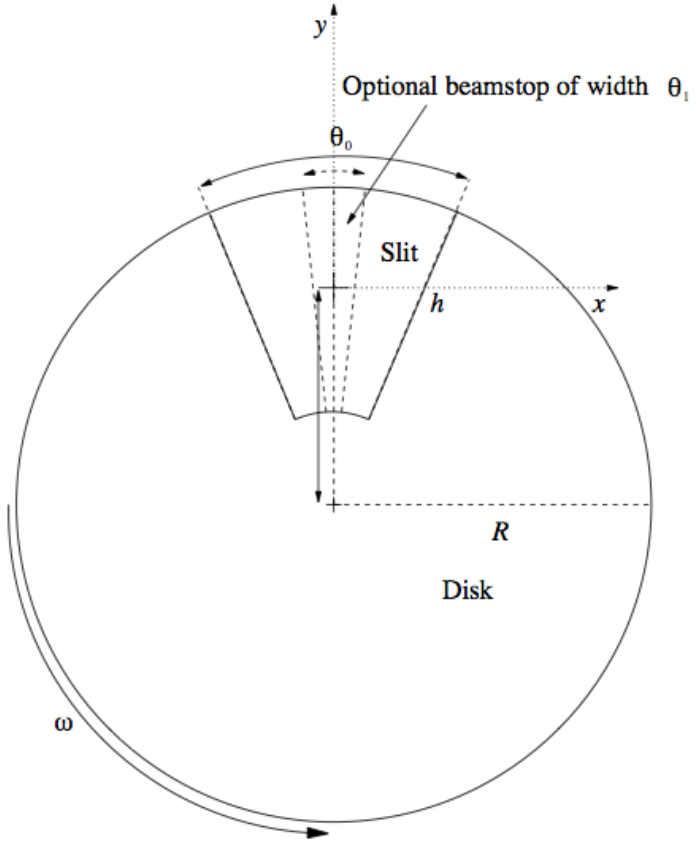
housing

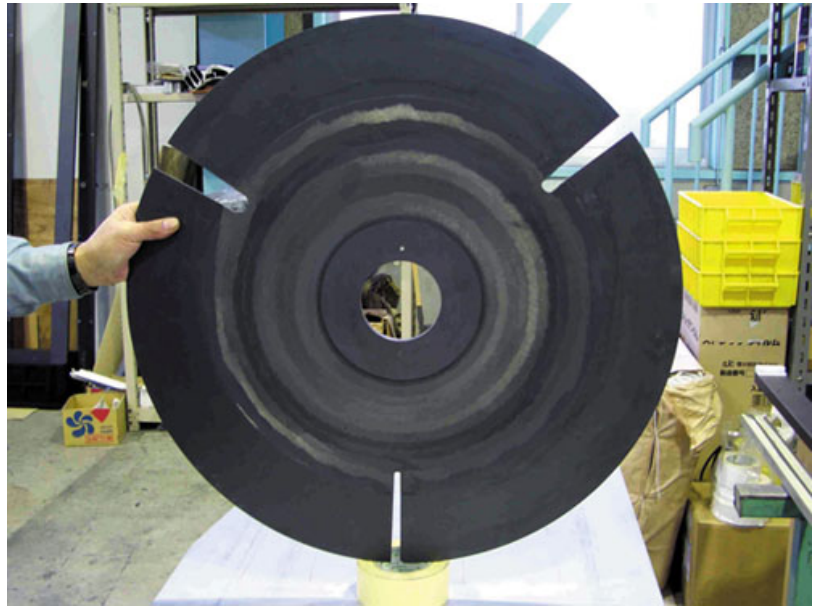
DISK CHOPPER

Define time structure of the beam

Time Of Flight (TOF) measurements

DISK CHOPPER



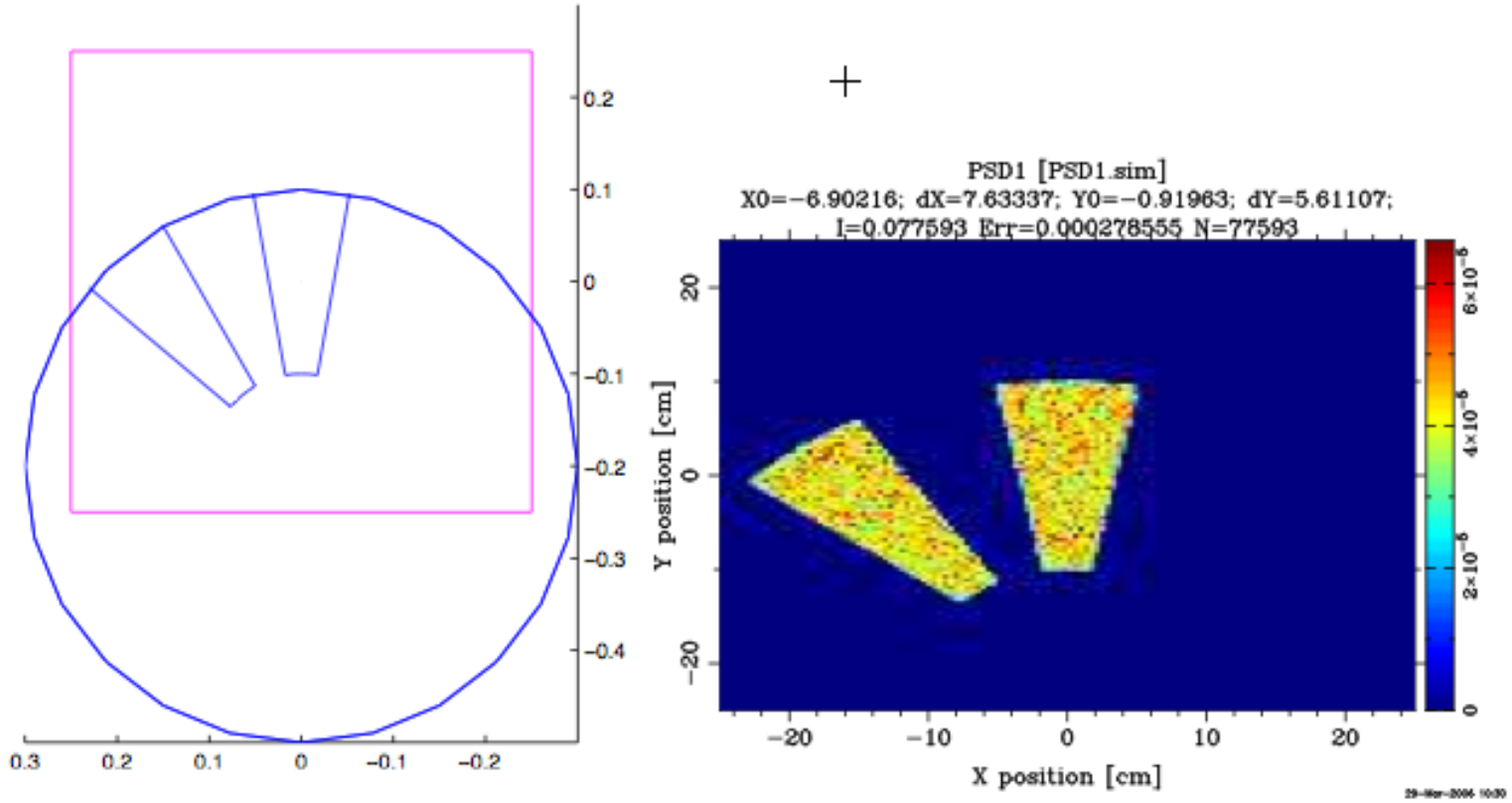


DISK CHOPPER

INPUT PARAMETER

nu	[Hz]	frequency
yheight [m]		slit height (if 0, yheight = radius)
radius	[m]	disk radius
theta_0 [deg]		angular width of slits
xwidth	[m]	horizontal slit width opening, beam center
jitter	[s]	jitter in time phase
delay	[s]	time delay
phase	[deg]	angular delay, overrides time
Isfirst	[0/1]	several choppers, defines first chopper

DISK CHOPPER_S



FERMI CHOPPER