Simulation Results

Two high-resolution spectrometers are necessary.

One or both should be vertical-bending spectrometer to get vertex position in targets.

	Hall-A	Hall-C pt.1	Hall-C pt.2	Hall-C pt.3	Hall-C pt.4	Hall-C Prev.
Beam Energy	4.2 GeV	2.3 GeV				
$e^{-\prime}$ arm	PCS + HRS	SPL + HES(v)	SPL + HES	PCS + HES(v)	PCS + HES	SPL + HES
$\Delta p/p$ ($e^{-\prime}$) [10^{-4} FWHM] (Fixed / Gas target)	1.0	6.9 / (N/A)	5.4 / (N/A)	5.8 / 6.6	5.2 / 5.4	4.2
$\Delta\Omega$ ($e^{-\prime}$) [msr]	4	4	6	3	4	7.0
K^+ arm	PCS + HKS	SPL + HKS	SPL + HKS(v)	PCS + HKS	PCS + HKS(v)	SPL + HKS
$\Delta p/p$ (K^+) [10^{-4} FWHM] (Fixed / Gas target)	2.7	3.2 / (N/A)	3.6 / (N/A)	2.7 / 2.9	4.0 / 6.3	2.0
$\Delta\Omega$ (K^+) [msr]	7	11	9	9	8	8.5
ΔZ [rms]	6 mm	-	-	9 mm	8 mm	>100 mm
ΔM [MeV (FWHM)]	0.94	0.86 / 0.93	0.81 / 0.86	0.74 / 0.76	0.75 / 0.96	0.65
Hyp. Gain Factor	1	0.5	0.6	0.3	0.4	-

Note1: (v) means "vertical bending" setup.
Note2: $^{12}_{\Lambda}$B was assumed.
Note3: $\Delta E(\text{beam}) = 2\times10^{-4}$ (FWHM)

Note4: Gain Factor = $\Gamma \times \Delta\Omega(K)$ / Hall-A