

## 6 GeV/c Unseparated Beam – 6GEV – A2

### Parameters:

Maximum Momentum: **6.5 GeV/c**

Length: **34 meters**

$\delta\Omega$ : **0.75 msr**

$\delta p/p$ : **5 % fwhm**

$\delta p\delta\Omega$ : **4 msr-%**

### Beam Optics:

- **Corrected to first order**
- **Target imaged through collimators located at two intermediate foci**

### Collimators:

1. **Horizontal momentum collimator – adjustable**
2. **Vertical slit at vertical Focus**
3. **Hole collimator at achromatic Focus**
4. **Close-in collimation downstream of production target**
5. **Beam halo collimators throughout beam line**

Target: **15 cm copper, water cooled,  $> 2 \times 10^{13}$  p/spill maximum**

Production Angle: **3.5 deg**

Flux (particles /  $10^{13}$  protons):

- **6 GeV/c  $K^+$ ,  $6 \times 10^7$  with  $2 \times 10^9$  p +  $\pi^+$**

### Present Use:

**E865,  $K^+ \rightarrow \pi^+ \mu^+ e^-$  Rare Kaon Decay**