

# Particle Identification

## Pressurized Gas Cherenkov

5.6 Atm SF<sub>6</sub> Cherenkov Medium

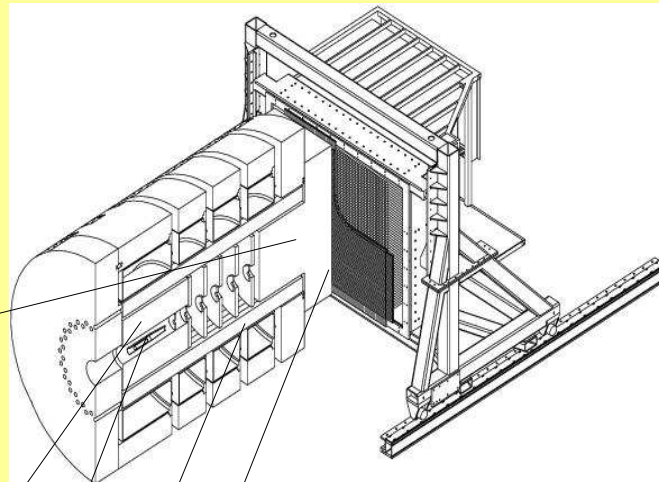
Effective K- $\pi$  separation for:  
1.5 GeV/c < p < 5 GeV/c

## Kinematic Fitting

$$\begin{aligned} \Sigma E_i &= E_\gamma + m_p \\ \Sigma p_x &= 0 \quad \Sigma p_y = 0 \quad \Sigma p_z = E_\gamma \\ \Delta S &= 0 \quad K_1 \rightarrow K_2, \Lambda \end{aligned}$$

## Drift Chamber

dE/dx  
(p < 300 MeV/c)



## Time of Flight System

Vertex Start Counter

Barrel Time of Flight

< 250 ps resolution

Forward Time of Flight  
Scintillator Wall

< 100 ps resolution