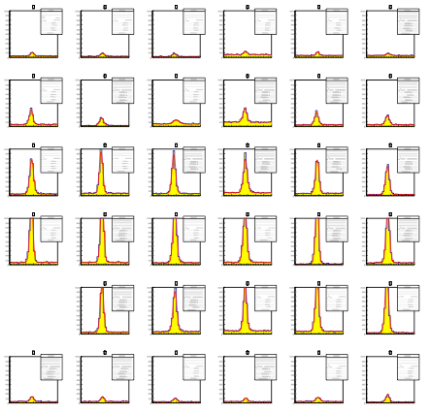
RICH Detector

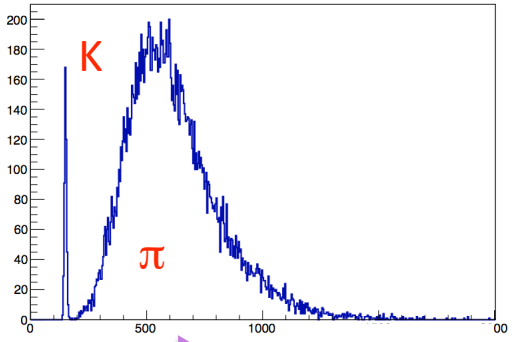
January 2013: selected by INFN in the short list to be presented to the Italian Ministry for dedicated 2.2 MEuro funding

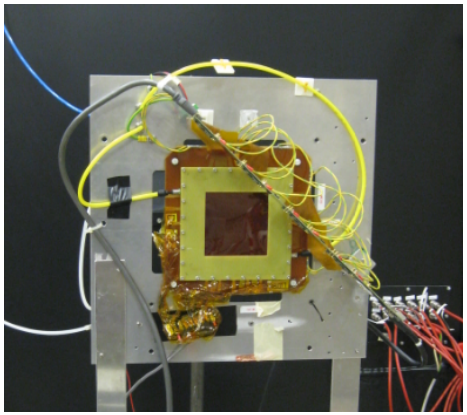
December 2012: extensive test-beam at CERN with hadron beams

Cherenkov Ring Profile

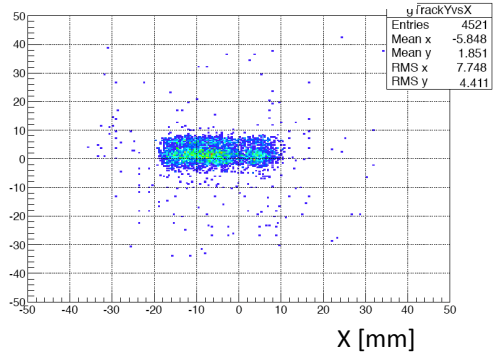


Beam ID

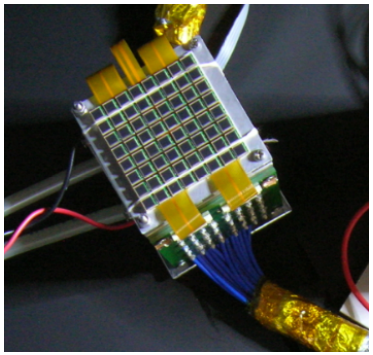




Beam Profile

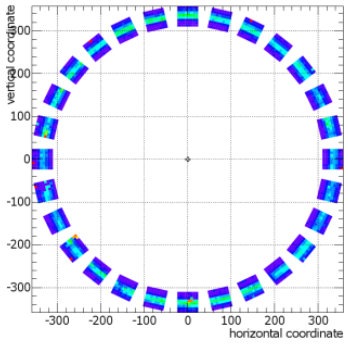


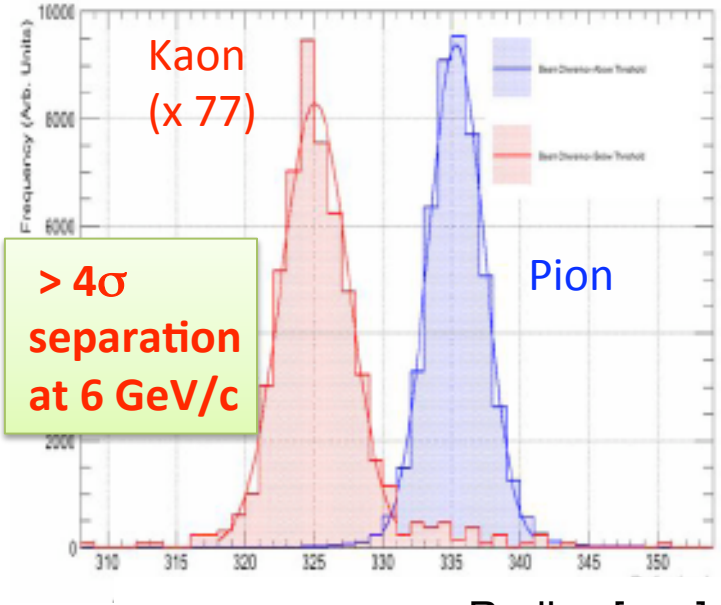
Δt with trigger



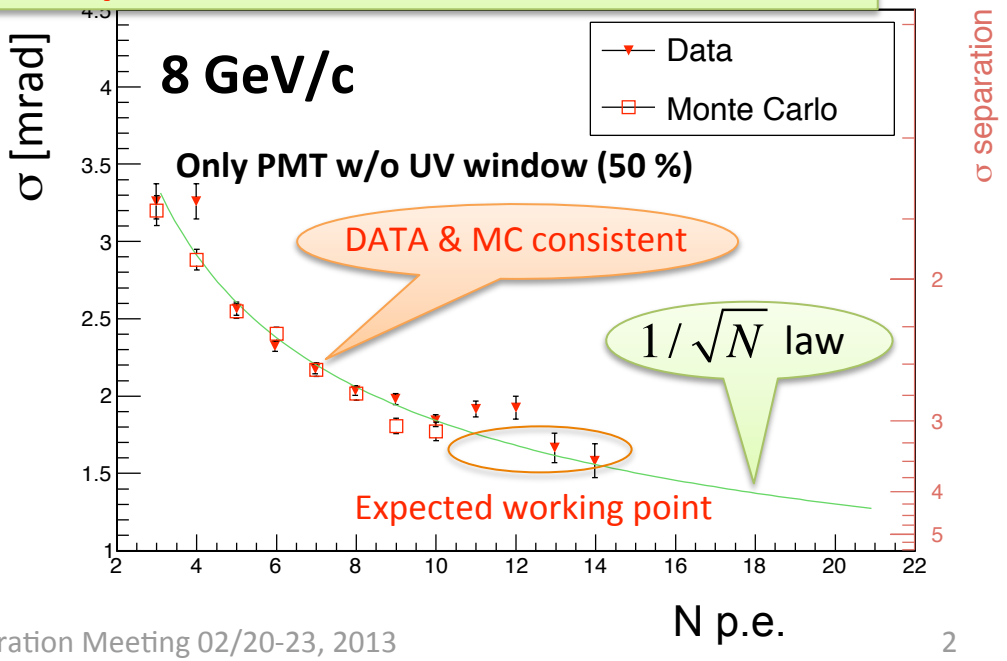
RICH Prototype: Direct Light

Aerogel n=1.05, Beam P = 6 and 8 GeV/c



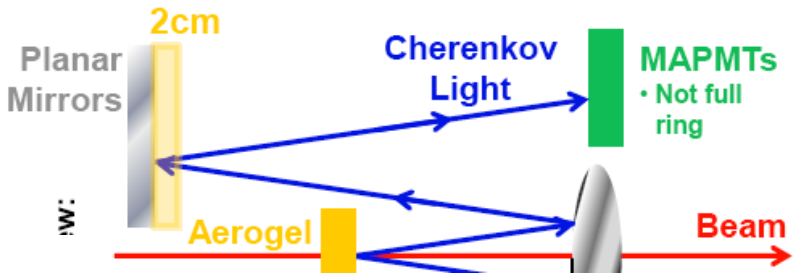


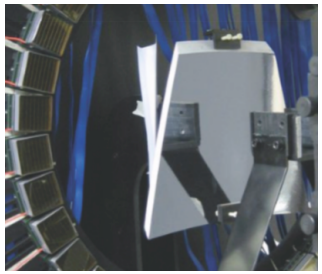
> 3σ separation at 8 GeV/c with not-UV PMT



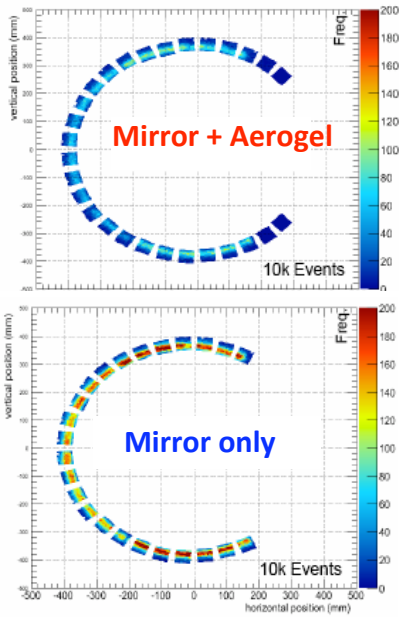
RICH Prototype: Reflected Light

Aerogel n=1.05, Beam P = 6 GeV/c

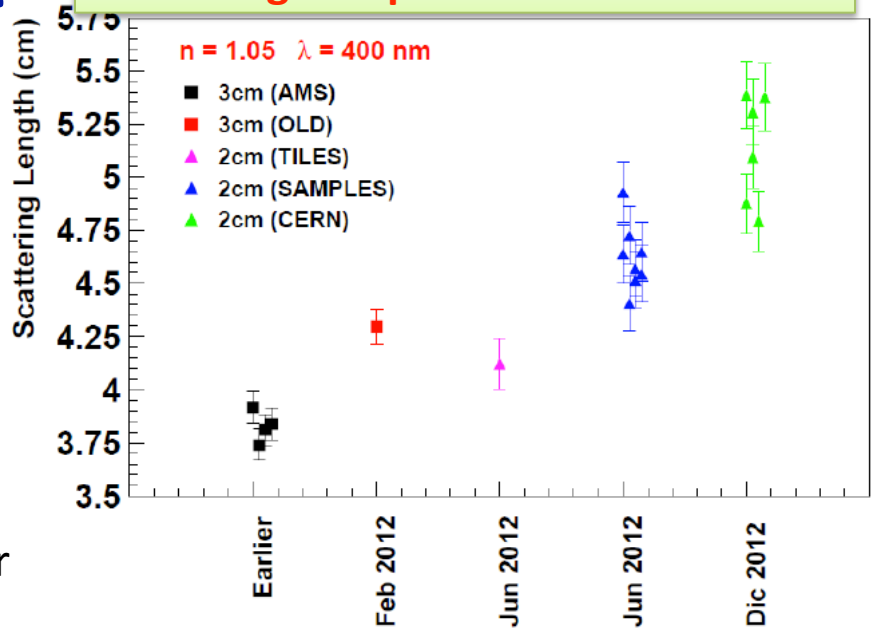




HTCC mirror



Aerogel improvement in Time



60% p.e. yield loss matches the requirements