

RICH GEMC GEOMETRY

Contalbrigo Marco &
Luciano Pappalardo & Luca Barion

INFN Ferrara

Rich Meeting, 10 February 2012

LH results for positive hadrons

Aerogel:

- $n=1.05$, $\lambda=5.5$ cm
- thick. increasing with radius:
2-4-6-8-10 cm

Mirror: $14^\circ - 35^\circ$

- 90% reflectivity

MA-PMTs: H8500

eff=0.65

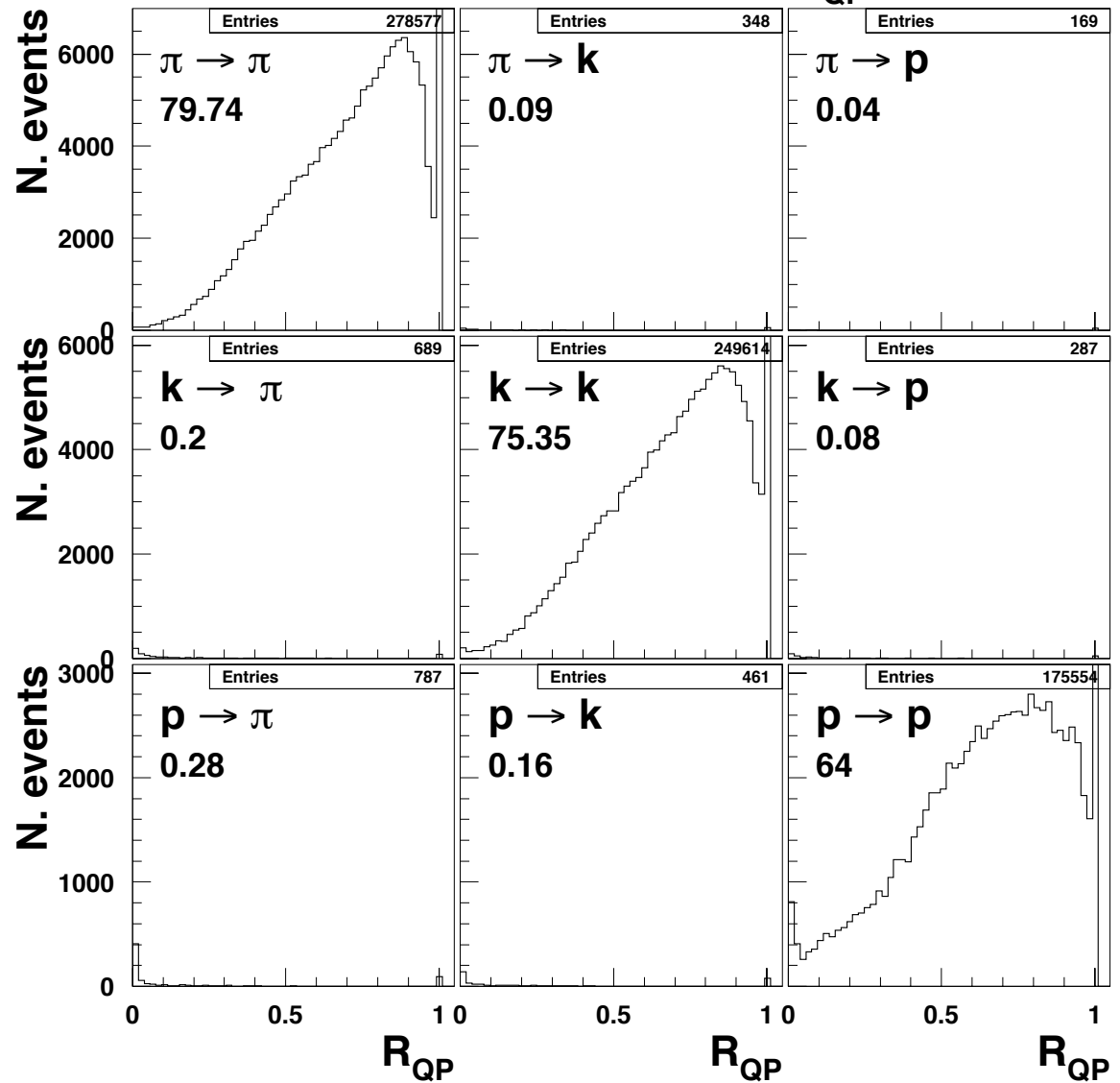
Contamination \sim few per mill

Efficiency \sim 80 %

previous tables based on *only* events with $n_{hit} > 2$

Identification quality:
in average good

$3 < E < 8$ GeV $N. hit > 2$ $R_{QP} > 0.0$



LH results for positive hadrons

Aerogel:

- $n=1.05$, $\lambda=5.5$ cm
- thick. increasing with radius:
2-4-6-8-10 cm

Mirror: $14^\circ - 35^\circ$

- 90% reflectivity

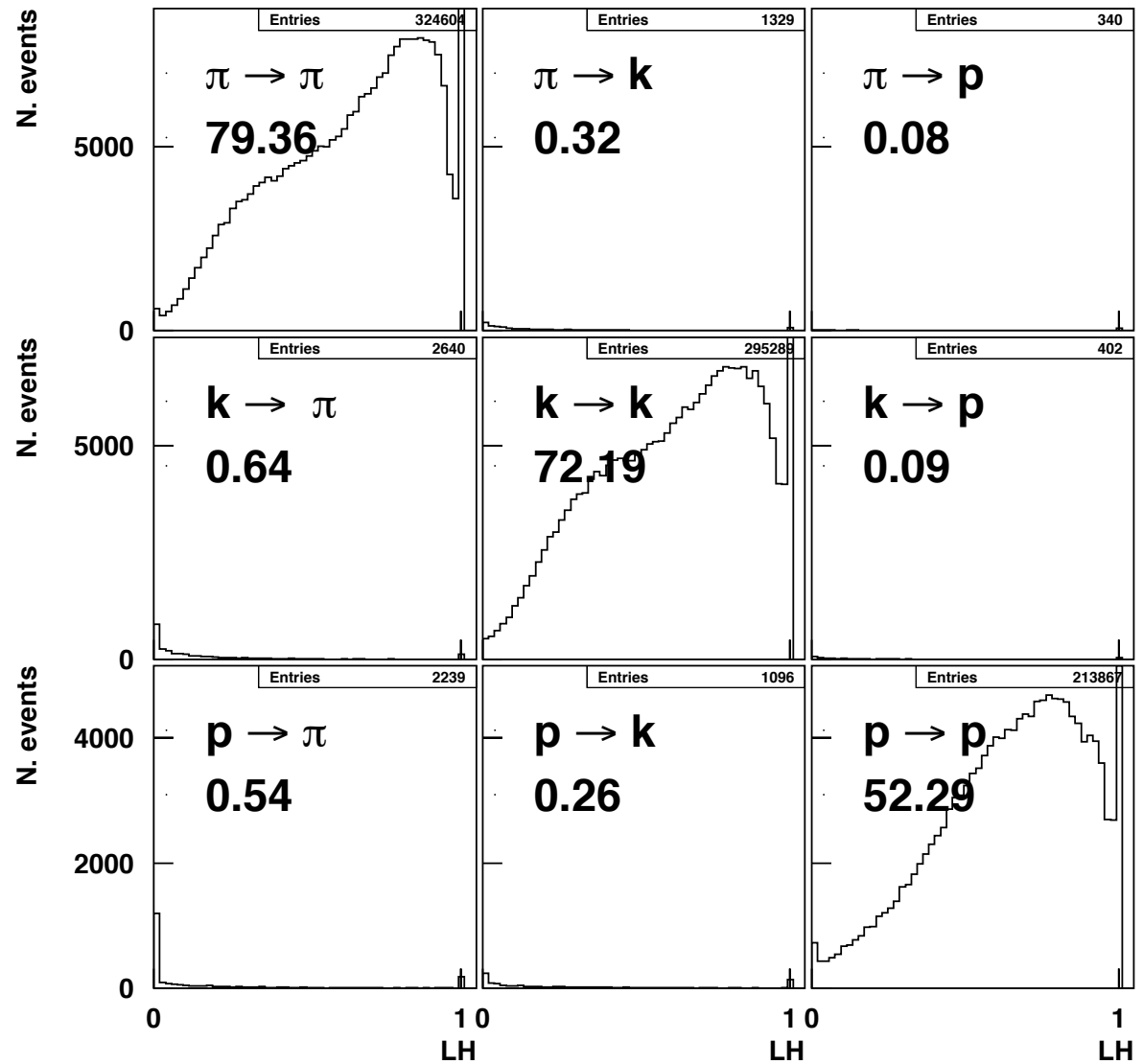
MA-PMTs: H8500
eff=0.65

Contamination \sim few per mill

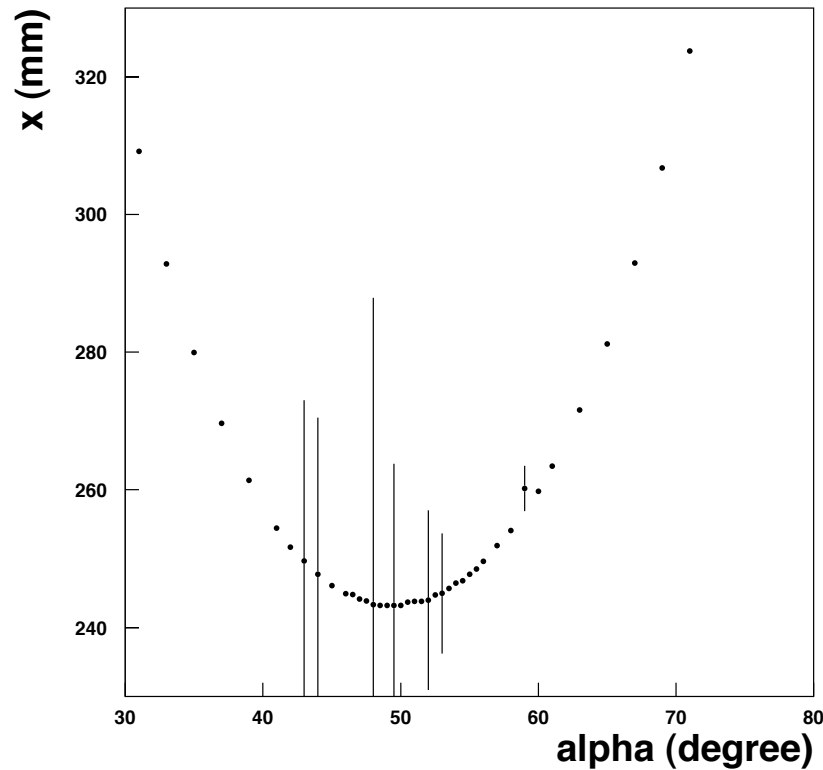
Efficiency \sim 80 %

previous tables based on
only events with $n_{hit} > 2$

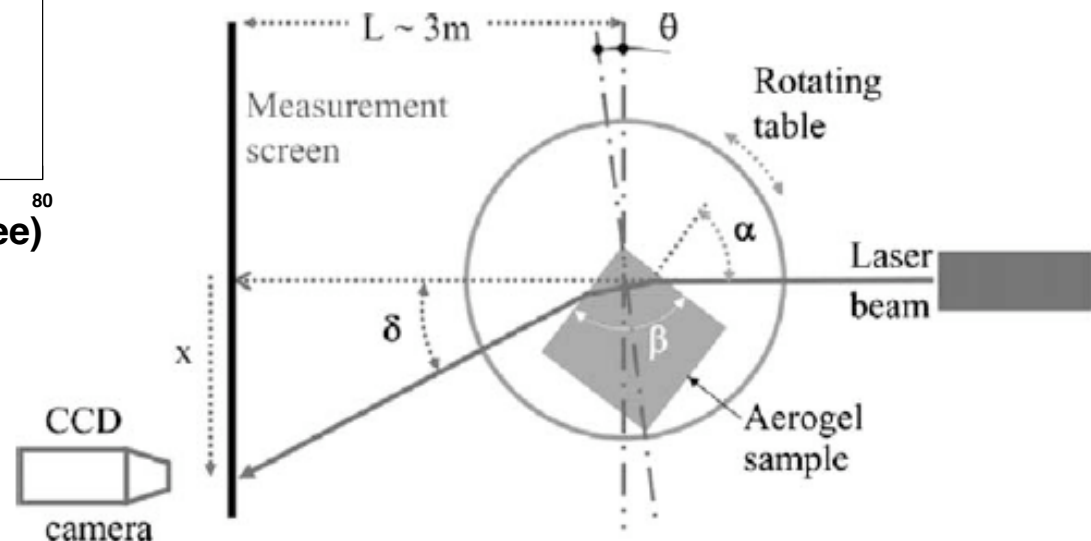
Identification quality:
in average good



The n measurement



$$\delta = \alpha - \beta + \arcsin \left\{ n \cdot \sin \left[\beta - \arcsin \left(\frac{\sin \alpha}{n} \right) \right] \right\}$$



NIMA 614 (2010) 184