

Calibration of Aerogel Tiles for the HELIX-RICH Detector

HELIX RICH Aerogel:

- Radiator plane of 36 (6x6) high refractive index ($n \sim 1.15$) aerogel tiles
- Tiles calibrated by measuring Cherenkov ring produced by 35 MeV electrons
- Custom built linear CCD-detector board
- Cherenkov ring sampled by 16 CCDs
- Refractive index varies smoothly across aerogel tiles
 - Well-described by a 2D polynomial
 - Non-normal distribution
- Refractive index measured to a precision of:

$$\frac{\Delta n}{n} \sim O(10^{-4})$$

