

NA62 GTK Beam Test Overview

M. Noy

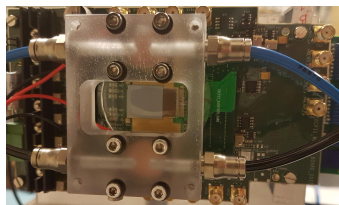
EP-ESE-FE Group, CERN

12th April 2018

GTK Beam Telescope



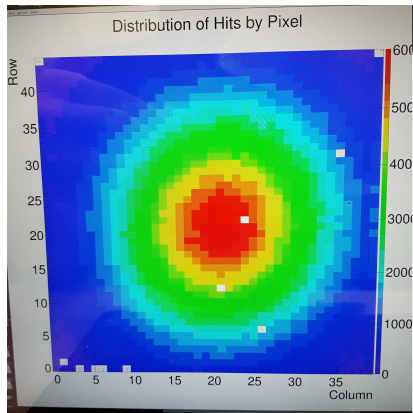
- ▶ Up to 4 planes
- ▶ size $\sim 60 \text{ cm} \times 100 \text{ cm}$
- ▶ weight $< 25 \text{ kg}$
- ▶ requested a motorised table
- ▶ small chiller nearby + PSU crate
- ▶ Read-out upgrade in progress



- ▶ TDCPix single chip assembly
 - ▶ $\sim 1.2 \text{ cm} \times 1.35 \text{ cm}$
- ▶ silicon hybrid pixel detector
- ▶ p-on-n and n-on-p sensors
 - ▶ possibly some other variants
- ▶ some pre-irradiated samples
- ▶ Time resolution: $\sim 150 \text{ ps}$

Beam Profile

- ▶ charged hadrons at 180GeV/c
- ▶ $> 10^4$ particles per spill
- ▶ Spot $\sim 1 \text{ cm} \times 1 \text{ cm}$ is perfect
- ▶ need a “spill warn” signal



Services Required

- ▶ “DESY” stage (reserved)
- ▶ power (220V)
- ▶ network
- ▶ beam shape, position, intensity measurements
- ▶ safety earth connection.