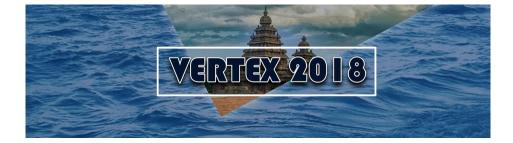
## The 27th International Workshop on Vertex Detectors



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## Status of silicon tracker in NA62

The Gigatracker is the NA62 beam tracker. It is made of three 63.1 mm  $\times$  29.3 mm stations of 300  $\mu$ m  $\times$  300  $\mu$ m hybrid silicon pixel detectors installed in vacuum ( $\sim 10^{-6}$ mbar).

The beam particles, flowing at 750 MHz, are traced in 4-dimensions by means of time-stamping pixels with a design resolution of 200 ps. This performance has to be maintained despite the beam irradiation amounting to a yearly fluence of  $2 \times 10^{14}$  1 MeV eq. n/cm<sup>2</sup>.

The detector material minimization is paramount, as the detector faces the full beam. The station material budget is reduced to  $0.5\% X_0$  by using (HEP world first) microchannels cooling.

We will describe the detector design and performances during the NA62 runs.

Primary author: PERRIN-TERRIN, Mathieu (Aix Marseille Univ, CNRS/IN2P3, CPPM, Marseille, France)

Presenter: PERRIN-TERRIN, Mathieu (Aix Marseille Univ, CNRS/IN2P3, CPPM, Marseille, France)