



Contribution ID: 83

Type: **Talk (20 min + 5 min discussion)**

Positron beam tomography using fast Faraday cup detectors

Monday, 4 December 2023 13:40 (25 minutes)

In the field of continuous low energy particle beams, Faraday cup detectors have been traditionally considered a way of precisely assessing the particle flux, given a few minutes of integration time and assuming no spatial resolution is required. Two years ago we presented a novel Faraday cup design, pursuing the aim is of providing fast and position-sensitive measurements. We will present now the first measurement of a positron beam using a locally-amplified Faraday cup detector and demonstrate how the position sensitivity of the detector can be leveraged to perform a full two-dimensional tomography of the beam shape.

Primary author: GUATIERI, Francesco (Università degli Studi di Trento)

Co-author: ZIMMERMANN, Michael

Presenter: GUATIERI, Francesco (Università degli Studi di Trento)

Session Classification: Positrons

Track Classification: Positrons