Contribution ID: **45** Type: **not specified**

RF Beam Diagnostics II

Tuesday 27 June 2023 08:30 (1 hour)

The lecture reviews general concepts of diagnostics for beam intensity diagnostics, beam transverse position and bunch length as well as beam arrival. Such concepts are discussed with some examples. Concerning the beam intensity, current transformers and passive cavity are presented by showing the working principle and the main properties. Strip-lines and cavity beam position monitors have been selected to show the main issues of position measurements.
Concerning the bunch length measurement, the case of RF deflectors for bunch length
measurement in high brightness LINAC is carefully described. The lecture shows the measurement principle as well as the design, realization and operation of a standing wave cavity; examples of beam measurements are given as well.

Presenter: Prof. MOSTACCI, Andrea (Sapienza University of Rome e INFN-Roma I (IT))