

GFA - PSD Accelerator Seminar

Fixed Target Experiment Beamlines and Test Beams at CERN

Monday, 9 September 2019, 15.00 h, WBGB/019

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The presentation provides an overview over selected beamlines for fixed-target experiments and test beams at CERN. The conceptual description of the secondary and tertiary beams is given. It includes the generation of the secondary beams by interaction of primary beam extracted from the Proton Synchrotron and Super Proton Synchrotron with e.g. a target, converter, radiator or absorber and explains the parameters of particle production. The design of secondary and tertiary beamlines is presented, comprising the methods for selection of particle type (pions, kaons, muons, electrons, neutral particles), selection of beam energy (0.5 – 15 GeV for the East Area and 5-400 GeV for the North Area) and for the manipulation of beam parameters such as beam size, divergence, intensity etc. A brief summary of the common beam diagnostic tools and their functionality is given.

For more details, contact Marco Schippers, 4229