Seminar über Microwave Physics and Atmospheric Physics

Referent/in: Nicolo Biancacci, CERN

Titel: EM material characterization techniques in particle accelerators

A beam circulating in a particle accelerator represents a source of impressed current exciting potentially harmful self-induced EM fields. Modeling of this interaction is key in order to ensure the preservation of the beam design properties from injection, acceleration, up to delivery to the target experiments. In this respect, RF measurements and simulations of the beam interaction in accelerator devices are systematically performed already at design stage, requiring the correct knowledge of the EM characteristics of the materials present in the structures. In this seminar, we will cover the main EM material characterization techniques performed to determine resistivity, permittivity and permeability, at room and cold temperatures, covering a large frequency range (DC - 100 GHz) as required by the present development of accelerator facilities.

Zeit: Freitag, 15. Dezember 2023, 10:15 Uhr

Ort: Room A97
https://unibe-ch.zoom.us/j/97081325603?pwd=d0ozME5xOS9pQVNxallLem81VHQyZz09
Meeting ID: 970 8132 5603
Passcode: iapmw