

RF scenarios and challenges for FCC-ee

The FCC-ee RF system must handle beams at different energies and beam intensities ranging from the high energy case of a few mA at 175 GeV to the heavily beam loaded situation at 1.45 A and 45.5 GeV. Higher order mode power will be a major issue at the highest beam intensities. An overview of these operating scenarios will be presented along with preliminary ideas on the RF system design, and the critical R&D topics will be identified.