

Latest developments in the split-ring resonator experiment

Friday 1 October 2021 12:05 (5 minutes)

A compact, longitudinal diagnostics for fs-scale electron bunches using a THz electric-field transient in a split-ring resonator (SRR) for streaking will be tested at the Far Infrared Linac and Test Experiment (FLUTE). We present the most important measures that have been carried out in the course of the preparations for the experiment: These include, first, the redesign of the laser optics at FLUTE as well as the successful installation of a module for efficient generation of intense THz radiation and its characterization. On the other hand, further steps to ensure temporal and spatial overlap between electron bunch and THz pulse were initiated.

Summary

Primary author: NABINGER, Matthias (KIT)

Co-authors: Dr NASSE, Michael; Dr BRUENDERMANN, Erik; FUNKNER, Stefan (KIT); Dr HAERER, Bastian; MUELLER, Anke-Susanne; NIEHUES, Gudrun (KIT); RUPRECHT, Robert; SCHÄFER, Jens (KIT IBPT); Mr SCHMELZER, Thiemo; Dr SMALE, Nigel

Presenter: NABINGER, Matthias (KIT)

Session Classification: Session Beam Diagnostics