

## STATUS OF THE ANKA SHORT BUNCH OPERATION

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The ANKA electron storage ring located at the Research Centre Karlsruhe in Germany operates in the energy range from 0.5 to 2.5 GeV. To generate coherent radiation in the far IR (THz) region, a dedicated operation mode with reduced momentum compaction factor is used. The beam behaviour with short bunches has been studied under various conditions and at different beam energies (see Fig. 1). This presentation gives an overview over the status and perspectives of the operation of the ANKA storage ring with short bunches.

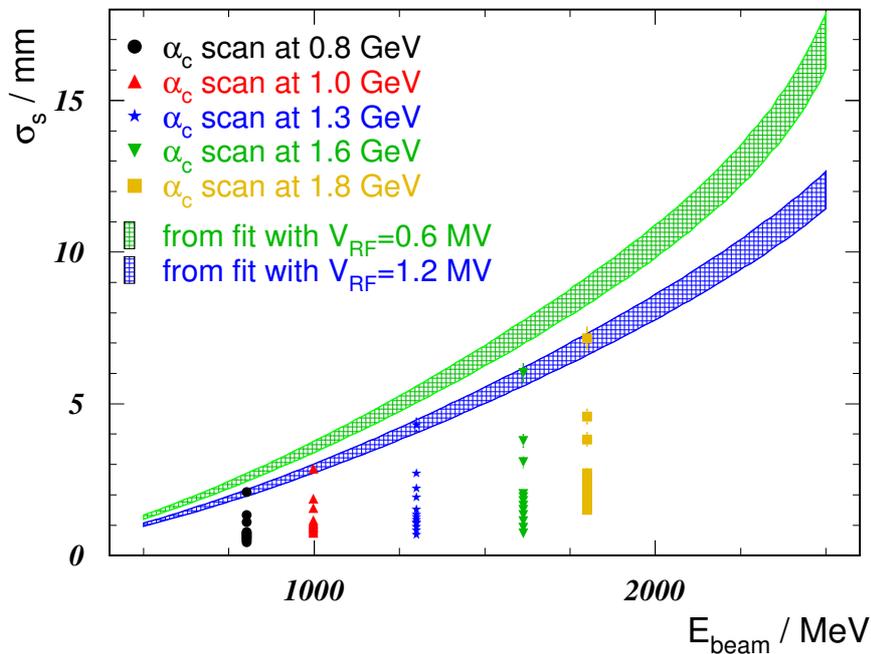


Figure 1: RMS Bunch length derived from measurements of the synchrotron frequency as a function of beam energy. The hatched regions are error bands obtained by a full error Monte Carlo. The markers represent bunch lengths derived from synchrotron frequency measurements for different beam energies.