Design of a time-resolved electron diagnostics using THz fields excited in a split ring resonator at FLUTE

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A new time-resolved diagnostics using THz fields excited in a split ring resonator (SRR) has been proposed [1,2] and is being built at the test-facility FLUTE at KIT [3] as a collaboration among KIT, PSI and University of Bern. Thanks to the short pulse duration, high resonant frequency and high field enhancement of the THz pulses, such SRR diagnostics could make femtosecond resolution possible.

**References**