**Losses of Runaway Electrons during Ergodization**

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TEXTOR has a long tradition in performing discharges with a large fraction of high energetic runaway electrons. The runaway electrons reach an energy up to 25 MeV – 30 MeV; the runaways are detected by different means: the losses of the runaway electrons are measured by the detection of hard X-rays and energetic neutrons, the runaways inside the discharge are detected by their synchrotron emission in the mid IR range. This radiation is recorded by a fast IR camera which provides both the time information and the spatial structure of the runaway electrons inside the discharge. The electron density of the well reproducible discharges amounts to typically $5*10^{19}$ $m^{-3}$ and the runaway electrons are not only generated during the start of the discharge but during the whole discharge.

In the experiments, the runaways are prepared during the first three seconds such that the electrons have gained sufficient energy and a suitable amount of synchrotron radiation is emitted. Then the ergodization is switched on. It is observed that with the onset of the ergodization the runaway loss jumps up and remains at an enhanced level during the ergodization phase. The loss rate increases with the degree of ergodization. In addition, runaway instabilities are observed during the ergodization phase where the loss rate shows sharp spikes in which substantial fraction of the runaway electrons are lost. The spike frequency increases strongly with the degree of ergodization.

More experiments on runaway electrons are foreseen during the ongoing campaign. The aim of these experiments is to visualize the “structures” of the runaway electrons imposed by the ergodization. For this purpose, the set-up of the IR-camera has been improved such that a large fraction of the plasma cross section can be observed.