

development of a suitable high-power fusion gyrotron is one of the main research items. The coaxial-cavity gyrotron technology was chosen as the technology for future multi-megawatt gyrotrons operating at multiple frequencies. The existing KIT 170 GHz short-pulse pre-prototype has been upgraded to operate at longer pulses. It is under test currently. Using the new FULGOR test stand and the new 10.5 T magnet a modified version will be prepared to run at frequencies above 200 GHz. The gyrotron development is accompanied by the research on advanced key components, such as MIG, MDC and broadband RF window.

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