

21st joint workshop on electron cyclotron emission (ECE) and electron cyclotron resonance heating (ECRH)

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Overview of ECRH and EBW modelling on ST40

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A dual-frequency electron cyclotron resonance heating (ECRH) system is currently under development on the ST40 spherical tokamak, which will employ two gyrotrons with a maximum output power of 1 MW each at frequencies of 105GHz and 140GHz. In this paper we will present modelling results of ECRH and EBW current drive capabilities in ST40 of both available gyrotrons for various launch configurations and operating frequencies, including methods under consideration for non-inductive plasma start-up.

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