

## Main-ion temperature and plasma rotation measurements based on scattering of electron cyclotron heating waves in ASDEX Upgrade - DTU Orbit (09/11/2017)

### Main-ion temperature and plasma rotation measurements based on scattering of electron cyclotron heating waves in ASDEX Upgrade: Paper

We demonstrate measurements of spectra of O-mode electron cyclotron resonance heating (ECRH) waves scattered collectively from microscopic plasma fluctuations in ASDEX Upgrade discharges with an ITER-like ECRH scenario. The measured spectra are shown to allow determination of the main ion temperature and plasma rotation velocity. This demonstrates that ECRH systems can be exploited for diagnostic purposes alongside their primary heating purpose in a reactor relevant scenario.

#### General information

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