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P4.1090 ICRF modelling with Non-Maxwellian distributions in JET

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See the full abstract here:
http://ocs.ciemat.es/EPS2019ABS/pdf/P4.1090.pdf

Ion Cyclotron Range of Frequency (ICRF) Heating is an important heating source on the Joint European Torus (JET). For the D-T campaign, various scenarios of ICRF heating are considered including second harmonic Tritium resonance and the three species hybrid resonance method [Y. Kazakov et al, Nature Physics 973 13 (2017)]. The ICRF full wave modelling codes TORIC and AORSA have both been coupled to the Fokker-Planck solver, CQL3D, and are used routinely to model wave propagation and absorption and the generated fast ion distributions in C-Mod experiments with validation through experimental comparisons with synthetic diagnostics [J. Wright et al, Plasma Physics and Controlled Fusion, 025007 56 (2014).] We will show parametric dependence of ion tail temperatures and neutron fusion rates on species concentration for various scenarios as well as comparisons between the finite Larmor radius TORIC code and the all orders Larmor radius AORSA code.

** See author list of "Overview of the JET preparation for Deuterium-Tritium Operation" by E. Joffrin et al to be published in Nuclear Fusion Special issue: Overview and summary reports from the 27th Fusion Energy Conference (Ahmedabad, India, 22-27 October 2018.)

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