

W7-X Fast Ion Topical Group Meeting

Fast Ion Model Validation Proposals

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Proposals related to fast ion model validation

Lead Proponent	Topic	Co-Propoents	Description
McNeely, Paul	Demonstration of the HST Interlock	I. Stepanov, S. Lazerson, N. Rust, D. Hartmann	NBI into empty torus till HST interlock. Provides validation data for NBI modeling and ANSYS calculations.
Lazerson, Samuel	Assessment of FI confinement	D. Kulla, A. LeViness, A. van Vurren	Blipping experiments provide NBI deposition data, along with FI slowing down data for model validation.
Lazerson, Samuel	Effects of Core Island on Energetic and Thermal Particle Transport	D. Kulla, A. LeViness, A. van Vurren, J. Geiger	Provides not only fast ion data to validated against simulation but also data for validation of equilibrium models.
Lazerson, Samuel	Alfvén modes at low density	C. Slaby	Provides data for model validation of Alfvén stability calculations.
Hartmann, Dirk	Comparison of NI20/NI21	S. Lazerson, P. McNeely, N. Rust	Comparison discharges with NI20/NI21 provide data for fast ion modeling.
Lazerson, Samuel	ECRH to mimic NBI divertor loads	S. Lazerson, Y. Gao	Comparative discharge where ECRH is used to mimic NBI to compare divertor loads. Allows for assessment of divertor FI vs. convective loads.

Proposals related to fast ion model validation

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Mulas, Sadig	NBCD in W7-X	S. Lazerson, A. Cappa	NBI discharges to provide data for validation of Neutral Beam Current Drive
Mulas, Sadig	Effect of CX on FI in W7-X	S. Lazerson, A. Cappa	Discharges to help asses the effect of CX processes on FI wall loads.
Kulla, David	Fast Ion Distribution Function Studies	S. Lazerson, O. Ford, C. Slaby	Discharges to asses the FI distribution function.