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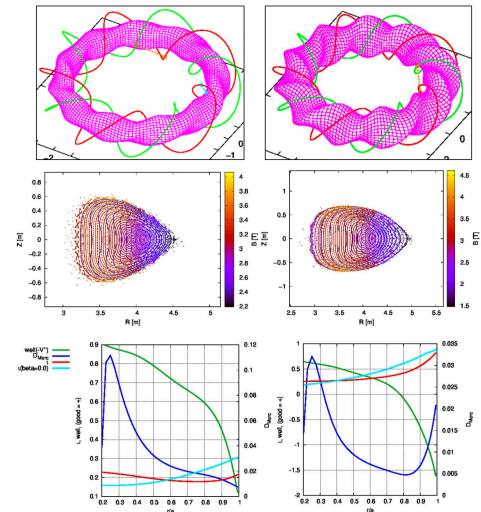
Commentary

Development and Prospects of Anisotropic-Ion-Pressure Plasma Fluid Model for Simulating Fusion Edge Plasmas	TOGO Satoshi	299
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Special Topic Article

Research on High-Temperature-Density Plasmas using Density-Functional-Theory (DFT) Calculation		
1. Introduction	MORITA Hiroki	307
2. Applications to Vacancy-Hydrogen Atom Cluster Formation in Tungsten	KATO Daiji and NOGUCHI Yuki	308
3. DFT Simulations of Gold Hohlraum	OGITSU Tadashi	313
4. Quantum Molecular Dynamics Approach to High Pressure Research	MURAYAMA Daisuke, OHMURA Satoshi, TAKETOSHI Kai and OZAKI Norimasa	317
5. Multiscale Simulations of the Interaction between Light and Graphene	KURAMITSU Yasuhiro, MINAMI Takumi, KAWAI Ryotaro, OHNISHI Naofumi and YABANA Kazuhiro	322

PFR List	328
Information	329
Announcement	334



Cover

We performed a proof-of-principle for a method for predicting plasma confinement indices for various magnetic field configurations with different helical coil windings using Gaussian process regression with coil shape parameters as inputs. From the top to bottom, these figures show two examples of the last-closed-flux surface and coil shape of MHD stable magnetic field configurations, their Poincaré plots of cross section, and the values of Mercier index D_{Merc} , rotational transform ι , and the magnetic well $-V''$, extracted from the training data. The left column shows small-volume configuration, and the right column shows large-volume one. Both of them are MHD-stable configurations but have different characteristics.

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