Special Topic Articles

Simulation of Magnetically Confined Fusion Plasma by Integrated Code and Its Prospect

1. Development of Integrated Code for Fusion Plasma Simulation
   HAYASHI Nobuhiro, FUKUYAMA Atsushi, MURAKAMI Sadayoshi, YOKOYAMA Masayuki and FUJITA Takaaki

2. Physics Modules Constituting Integrated Code
   MURAKAMI Sadayoshi, HONDA Mitsuru, AIBA Nobuyuki, MATSUYAMA Akinobu, HAYASHI Nobuhiro, HOSHINO Kazuo,
   FUJITA Takaaki, FUKUYAMA Atsushi and YOKOYAMA Masayuki

   FUKUYAMA Atsushi, HAYASHI Nobuhiro, MURAKAMI Sadayoshi, YOKOYAMA Masayuki and FUJITA Takaaki

   YOKOYAMA Masayuki, SATAKE Shinsuke, HONDA Mitsuru, AIBA Nobuyuki, HAYASHI Nobuhiro, YAGI Masatoshi, FUJITA Takaaki,
   MURAKAMI Sadayoshi, SEKI Ryosuke, YAMAGUCHI Hiroyuki and NUGA Hideo

5. Future Prospects of Integrated Code Development
   HONDA Mitsuru, NARITA Emi, HAYASHI Nobuhiro, YAGI Masatoshi, FUKUYAMA Atsushi,
   MURAKAMI Sadayoshi, YOKOYAMA Masayuki and FUJITA Takaaki

6. Conclusion and Acknowledgements
   HAYASHI Nobuhiro, FUKUYAMA Atsushi, MURAKAMI Sadayoshi, YOKOYAMA Masayuki, FUJITA Takaaki and HONDA Mitsuru

Front Runner

Characteristics of High-Temperature Bubbles Observed in an ECR Plasma
   TERASAKA Kenichiro and YOSHIMURA Shinji

PFR Abstracts

Information

Announcement

Cover

Propagation of 8.2 GHz electron cyclotron (EC) wave and the dependence on the electron density based on wave optics model. The propagation and the absorption of EC waves are analyzed for the density limit observed in a magnetospheric plasma device RT-1. For the vacuum magnetic field configuration and typical electron density distribution, the wave propagation is solved based on a cold plasma approximation. As the central electron density increases, the cutoff area grows up, and the wave is difficult to access the EC resonance layer. (Takahiro MORI et al., Plasma and Fusion Research, Vol. 14, 3401134 (2019) http://www.jspor.jp/)