

Abstract Submitted
for the DPP17 Meeting of
The American Physical Society

Overview of FAR-TECH's magnetic fusion energy research¹ JIN-SOO KIM, I. N. BOGATU, S. A. GALKIN, J. ANDREW SPENCER, V.A. SVIDZINSKI, L. ZHAO, FAR-TECH, Inc. — FAR-TECH, Inc. has been working on magnetic fusion energy research over two-decades. During the years, we have developed unique approaches to help understanding the physics, and resolving issues in magnetic fusion energy. The specific areas of work have been in modeling RF waves in plasmas, MHD modeling and mode-identification, and nano-particle plasma jet and its application to disruption mitigation. Our research highlights in recent years will be presented with examples, specifically, developments of FullWave^{1,2,3}(Full Wave RF code), PMARS⁴ (Parallelized MARS code), and HEM⁵ (Hybrid ElectroMagnetic code). In addition, nano-particle plasma-jet⁶ (NPPJ) and its application for disruption mitigation will be presented. [1]V. Svidzinski et al, Physics of Plasmas 23, no. 11 (2016), [2] J. A. Spencer et al (DPP17) [3] L. Zhao et al. (DPP17) [4] V. Svidzinski et al (DPP17) [5] S. A. Galkin et al (DPP17) [6] I. N. Bogatu et al (DPP17)

¹Work is supported by the U.S. DOE SBIR program.

Liangji Zhao
FAR-TECH, Inc.

Date submitted: 14 Jul 2017

Electronic form version 1.4