Principal Investigator: Ta-Ming Fang
Award ID: AFOSR Contract FA9550-07-C-0053
Organization: Massachusetts Technological Laboratory, Belmont, MA
Title: Kinetic Theory of Turbulence in Magnetized Plasmas, Charged Particle Acceleration, and Cross-Scale Coupling

Project Participants

Senior Personnel
Name: Fang, Ta-Ming
Name: Yoon, Peter H.

Activities and Findings

This is the final report for Year 3 of AFOSR Contract FA9550-07-C-0053 that began in March 2010 and ends in February 2011. We have worked on fundamental theory of turbulence and charged-particle energization in magnetized plasmas. As a result of our research activities, 15 papers have been published in refereed scientific journal, two manuscripts that had been submitted for publication earlier are now accepted or in press, and two other manuscripts have been submitted for publication and are under review. All the publications and submitted or accepted manuscripts acknowledge the AFOSR Contract FA9550-07-C-0053. The Principle Investigator Dr. Ta-Ming Fang has participated in scientific discussions in many of the publications, although his name does not always appear in the manuscripts. However, in one major paper [Yoon and Fang, Nonlinear theory of ion-cyclotron instability, Plasma Phys. Contr. Fusion, under review (2010)] he played an important role. The following is the list of publications:

Journal Publications

— Published —


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— Accepted for Publication or in Press —


— Under Review —
