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教育背景	2005-2009: 理学学士-河北科技大学 2010-现今: 博士在读-中国科学技术大学
邮箱	pfliu@mail.ustc.edu.cn
研究主题	非线性回旋动理学研究
研究内容简介	在非李变换回旋动理学理论基础上, 利用拉回和推进变换, 推导出 Vlasov-Maxwell 方程组。在此基础上构建了适用于研究高频射频波的模型, 并推广到托卡马克位型。为了研究非线性物理, 把导心和回旋中心变换精确到二阶, 保留了分布函数所有的二阶拉回变换, 导出了非线性洛伦兹力的极化效应。
发表的论文	P. Liu, W. Zhang, C. Dong, J. Lin, Z. Lin, and J. Cao, Nuclear Fusion 57, 126011 (2017).
会议报告	Pengfei Liu, Wenlu Zhang, Jingbo Lin, et al. Gyrokinetic Simulation Model for High Frequency Processes in Toroidal Geometry. 5th Conference on Magnetic Fusion Theory and Simulation, Beijing, 2017
会议海报	<p>Pengfei Liu, Jinbo Lin, Wenlu Zhang, and Zhihong Lin, A closed Vlasov-Maxwell model for high frequency process in plasma, 57th Annual Meeting of the APS DPP, 2015.</p> <p>Pengfei Liu, Wenlu Zhang, Jinbo Lin and Chao Dong, Moments of gyrocenter distribution, 43rd EPS Conference on Plasma Physics, 2016.</p> <p>Pengfei Liu, Wenlu Zhang, Jinbo Lin and Chao Dong, A closed Vlasov-Maxwell model for high frequency nonlinear process in plasma,, 10th West Lake International Symposium on Magnetic Fusion &amp; 12th Asia Pacific Plasma Theory Conference, 2016.</p> <p>Pengfei Liu, Wenlu Zhang, Jinbo Lin and Chao Dong, A nonlinear gyrokinetic Vlasov-Maxwell system for high-frequency simulation in toroidal geometry, 58th Annual Meeting of the APS DPP, 2016.</p>