

2014 Autumn Semester, course for graduate student
Lecture notes: Physics of Laser-Plasma Interaction

VII. 自生磁场 (self-generated magnetic field)

Bin Qiao

School of Physics

Peking University, Beijing, P. R. China

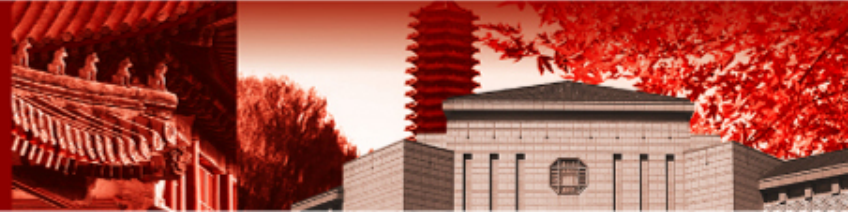
Email: bqiao@pku.edu.cn

Office: Room 544 (South), Physics Building

Tel: 62745005



北京大学

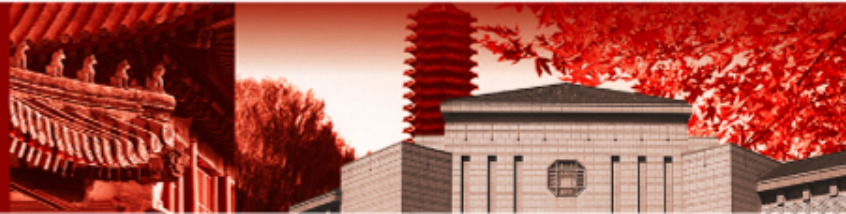


1. 热磁机制 (大尺度磁场—流体力学尺度)

$$\frac{\partial \vec{B}}{\partial t} = \frac{c}{e} \lambda [\nabla T_e \times \nabla \ln n]$$

2. 等离子体波-粒子非线性作用的自生磁场: (小尺度磁场——等离子体波长尺度)

$$\vec{B} = \frac{e}{i2m_e \omega_{pe} c} \vec{E} \times \vec{E}^* \quad \times$$



谢谢!



北京大學