



IAEA FEC 2016

Contribution ID: 595

Type: **Poster**

## **Parallel Momentum Transport Induced by RF Waves and by Plasma Turbulence**

*Wednesday, 19 October 2016 14:00 (4h 45m)*

Generation of plasma toroidal flow without or with low momentum input has been attracted much attention due to the key issue of plasma rotation on MHD stabilization and turbulence regulation. The general momentum equation is reached with a generalized ponderomotive force and then the drive and transport of parallel momentum are discussed in the case of rf injection and/or in the drift-wave turbulence background.

With the injection of rf waves, a generalized ponderomotive force exerts on the plasma, which includes three pa

The inhomogeneity of plasma profile can be integrated in the theory. For rf-driven case, this only contributes

This work is supported by NSFC, under Grant Nos. 11325524 and 11261140327, and MOST of China, under Contract 1

### **Paper Number**

TH/P4-35

### **Country or International Organization**

CHINA

**Primary author:** Prof. GAO, Zhe (Tsinghua University)

**Co-authors:** Dr CHEN, Jiale (Institute of Plasma Physics, CAS); Mr LI, Yang (Tsinghua University, Beijing)

**Presenter:** Prof. GAO, Zhe (Tsinghua University)

**Session Classification:** Poster 4

**Track Classification:** THW - Magnetic Confinement Theory and Modelling: Wave-plasma interactions; current drive; heating; energetic particles