HTPD 2018

Contribution ID : **169**   Type : **not specified**

2.24 The multi-channel Doppler Backscattering system on EAST

Monday, 16 April 2018 10:46 (120)

Doppler backscattering (DBS) system is a powerful diagnostic for turbulence and ExB flow measurements on tokamaks and other magnetic confinement devices. A W-band multi-channel DBS system has been developed on EAST for the turbulence measurements in core plasma. The DBS system can provide six spatially localized measurement locations by simultaneously launching six frequency probe beams with a fixed frequency difference, and the center frequency can scan in W-band (75-108 GHz) with X-mode polarization. The incidence angle is from -8 to 12 degree, and can cover the wave number range 2-20/cm. The radial location coverage is depended on the parameter of discharge, and can always cover the range from the top of pedestal to the core of plasma.

Primary author(s) :   ZHOU, CHU (University of Science and Technology of China)

Co-author(s) :   LIU, Adi (University of Science and Technology of China); FENG, Xi (University of Science and Technology of China)

Presenter(s) :   ZHOU, CHU (University of Science and Technology of China); LIU, Adi (University of Science and Technology of China); FENG, Xi (University of Science and Technology of China)

Session Classification :   Session #2, Monday Morning Poster Session