

Abstract Submitted  
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**Study of the harmonic oscillation on EAST by an eight-channel Doppler Backscattering (DBS) system.**<sup>1</sup> C. ZHOU, A.D. LIU, M. Y. WANG, J. Q. HU, J. ZHANG, H. LI, T. LAN, J. L. XIE, W. D. LIU, C. X. YU, University of Science and Technology of China, E. J. DOYLE, University of California, Los Angeles, UNIVERSITY OF CALIFORNIA, LOS ANGELES COLLABORATION, UNIVERSITY OF SCIENCE AND TECHNOLOGY OF CHINA TEAM — The eight-channel DBS system has been installed for turbulence measurements in such plasmas. The frequency range is 55 to 75 GHz, covering the entire H-mode pedestal, with a turbulence wavenumber range of 4-12/cm.. A harmonic oscillation has been observed by DBS on EAST during ELM-free H mode. The fundamental frequency of the coherent oscillation is 12-20 kHz and 2nd-8th harmonic are observed, and the radial coverage is from the edge to  $\rho \sim 0.85$ .

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