

Abstract Submitted
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Non-Gaussian properties of global particle and momentum fluxes driven by turbulence in a linear plasma¹ Y. NAGASHIMA, S.-I. ITOH, S. INAGAKI, Kyushu University, H. ARAKAWA, Japan Atomic Energy Agency, N. KASUYA, National Institute for Fusion Science, A. FUJISAWA, K. KAMATAKI, Kyushu University, T. YAMADA, The University of Tokyo, S. SHINOHARA, Tokyo University of Agriculture and Technology, S. OLDENBURGER, M. YAGI, Kyushu University, Y. TAKASE, The University of Tokyo, P.H. DIAMOND, University of California San Diego, K. ITOH, National Institute for Fusion Science — Non-Gaussian statistical properties of the azimuthally averaged momentum and particle fluxes driven by turbulence have been simultaneously observed in an inhomogeneous magnetized linear plasma column for the first time. We identified the distributions of both averaged fluxes as stretched Gaussians, and the transition from point-wise distributions to averaged ones was confirmed. The change in the particle flux precedes that in the momentum flux, demonstrating that the momentum flux is induced by the relaxation of density gradient.

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