

# **Experimental Setup for Nonlinear Energy Transfer Measurements in the Frequency Domain**

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The transfer of turbulent energy between different fluctuation scales is of great interest to obtain an understanding of turbulence-driven shear flows. Since different real-space scales can generally be associated with different frequency scales, the study of turbulent energy transfer in the frequency domain is also of interest. In the framework of the Hasegawa-Wakatani model, transport equations for internal and kinetic energy in the frequency domain can be derived. This work aims at measuring these transfer terms explicitly using a 9-tip Langmuir probe array in two different linear plasma devices, namely CSDX (Controlled Shear Decorrelation Experiment) and LAPD (LArge Plasma Device). The experimental setup is described and first results from measurements on CSDX are presented.