

Abstract Submitted
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Turbulence Variations in Plasmas driven by Transient Magnetic Fields¹ CHAVIS T. RAYNOR, ALONZO B. ALEXANDER, CHARLEMAGNE C. AKPOVO, JOSEPH A. JOHNSON, III, Center for Plasma Science & Technology, Florida A&M University — When the plasma in a D.C. glow discharge tube is suddenly exposed to an axial magnetic field of substantial strength, the plasma column undergoes a rotation about its axis of symmetry. Given that the plasma is already turbulent, we report our studies of the evolution of turbulence under the influence of this transient magnetic perturbation, focusing on changes in the transport parameters and the underlying turbulent “force.”

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