

Abstract Submitted
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Neurophysiology of pipe flow DWIGHT BARKLEY, Univ of Warwick

— This work explores the connection between the transition to turbulence in pipe flow and the dynamics of excitable media, as exemplified by nerve cells. The primary goal is to leverage years of extensive analysis of neural systems to understand the dynamics of transitional turbulence. To demonstrate the predictive nature of the approach, model simulations will be presented for puffs in pipe flow for cases not previously studied experimentally.

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