

Abstract Submitted  
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**Filamentary structures in the scrape-off layer using ArbiTER D.**

A. BAVER, J. R. MYRA, Lodestar Research Corporation — ArbiTER is a flexible eigenvalue code designed for plasma physics applications. In this presentation, we will be using it to examine the role of spherical torus geometry on quantities of interest for scrape-off layer (SOL) turbulence. This will include assessment of instability growth rates and three-dimensional eigenmode structure under various plasma conditions with particular attention to the penetration of modes radially and along field lines into the divertor region. Preliminary work will focus on developing and demonstrating routines which can be applied to NSTX-U in future work. \*Work supported by the U.S. Department of Energy Office of Science, Office of Fusion Energy Sciences, under Award Number DE-FG02-02ER54678.

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