

Abstract Submitted
for the DFD12 Meeting of
The American Physical Society

Turbulence Structure and its Signature in Hypersonic Turbulent Boundary Layers YIN CHIU KAN, PINO MARTIN, University of Maryland — We will investigate the turbulence structure from direct numerical simulation (DNS) data of Mach 3 and Mach 7 turbulent boundary layers. In particular, we will use geometric packet identification techniques and statistical tools to track and study hairpin packets, as well as their wall signatures and their association with superstructures. In addition, we will use a spatio-temporal pattern finding process to track multiple packets evolutions concurrently.

Yin Chiu Kan
University of Maryland

Date submitted: 02 Aug 2012

Electronic form version 1.4