Abstract Submitted
for the DFD09 Meeting of
The American Physical Society

On the frequency of high Reynolds number shedding in bluff-body wakes FERNANDO PONTA, Michigan Technological University — In this talk we shall explore the physical phenomenon of vortex shedding at high and extra-high Reynolds number. We start from a previous work where Ponta and Aref introduced a rationale for the empirically observed Strouhal-Reynolds number relationship for vortex shedding at low Reynolds. Analyzing the turbulent transport of momentum, the rationale is extended to high Reynolds number regimes. Results compared satisfactorily with the existent experimental evidence, and their extension to extra-high- Reynolds geophysical flows will be discussed.

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Date submitted: 05 Aug 2009 Electronic form version 1.4