

Abstract Submitted
for the APR05 Meeting of
The American Physical Society

Schmidt Numbers at an Interface between Two Plasmas¹ KEN LA-GATTUTA, Los Alamos National Laboratory — We review the concept of Schmidt number as a predictor of characteristics of the mixing of two fluids, along an interface. We then formulate Schmidt numbers for a particular type of plasma system of general interest; namely, a system made up of electrons, light ions, and partially stripped heavy ions. The light and heavy ions are considered to exist as two distinct fluid components, in contact along an interface and coupled by a permeating gas of free electrons, and self-consistent electric fields. Such a system might be descriptive of a tokamak plasma, in the vicinity of a very hot ablating wall or limiter, made from a refractory metal.

¹Schmidt Numbers at an Interface between Two Coupled Plasmas

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Date submitted: 14 Jan 2005

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