

Abstract Submitted
for the MAR14 Meeting of
The American Physical Society

The Asymmetric Top Molecule In An Electric Field SUZANNE PITTMAN¹, JOSE ALMAGUER², ERIC HELLER³, None, HELLER GROUP TEAM — The quantum and classical behavior of the asymmetric top has been studied in a variety of different contexts, and is known for its dynamical complexity due to have greater than 2 DOF. In this presentation the focus will be on the classical dynamics of an asymmetric top molecule with a dipole moment in an electric field (a non-integrable system), and how the underlying classical phase space structures, such as resonances, can impact the behavior of its quantum analog. Specifically, we will be presenting results from a classical simulation, which highlights both chaotic and regular regions for small electric fields depending on initial conditions.

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Date submitted: 15 Nov 2013

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