## APR05-2005-000344

Abstract for an Invited Paper for the APR05 Meeting of the American Physical Society

## Physics Teacher Demonstrations for the Classroom

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A sharing of physics and physics teaching demonstrations by Lee Murfee, a teacher of students learning physics and mathematics at Berkeley Preparatory School and the United States Military Academy for 21 years, and active member of the Florida Section of American Association of Physics Teachers (AAPT). Presentation is a fast paced array of physics and physics teaching demonstrations. Topics include who and what we teach, a successful science department philosophy, forces, acceleration, impulse, momentum, observations, pendulums, springs, friction, inclined plane, rotational motion, moment of inertia, teaching description of motion with data, equations and graphing, slope, uniform circular motion, derivatives, integrals, PASCO Data Studio sensor applications, students presenting to students, flashboards, sound, pressure, and sensitivity analysis in determining specific heat. Demonstrations apply to high school and college introductory physics teaching; handouts and some door prizes/gifts will be provided.

<sup>1</sup>Invited by Dr. Ernie Malamud; Physics Demonstrations for the Classroom and Outreach, 10:45 Tue, Apr 19