

Abstract Submitted  
for the DPP01 Meeting of  
The American Physical Society

Sorting Category: 3.0.0 (Educational)

**Physical Models for the Classroom**<sup>1</sup> A. NAGY, Princeton Plasma Physics Laboratory, R.L. LEE, General Atomics — The General Atomics fusion education program “Scientist in the Classroom” now in its fourth year, uses scientists and engineers to present “Plasma the 4th State of Matter,” to students in the classroom. Physical models developed for this presentation are used to demonstrate plasma characteristics and concepts from topical areas associated with plasma producing devices; e.g. vacuum, electricity, and light.

Using hands-on equipment, students see how magnets, gas pressure changes, and ionization potential levels affect plasmas. A piston, sealed volume, and vacuum chamber illuminate the ideal gas laws. Liquid nitrogen is used to explore thermodynamic temperature effects and changes in states of matter, through the cooling of different gases. The physical models used in this program were developed with the tight budget of teachers in mind, using simple designs and common commercial materials. The details of these models will be presented. Three very successful “build-it” days have been sponsored to enable teachers to build these physics models for use in their own classrooms.

<sup>1</sup>Supported by the US DOE under Contract DE-AC02-76CH03073 Princeton Plasma Physics Laboratory and Grant DE-FG03-97ER54402 General Atomics.

Prefer Oral Session  
 Prefer Poster Session

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Date submitted: July 30, 2001

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