## Abstract Submitted for the DPP02 Meeting of The American Physical Society

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Fusion Education Physical Models for Students and Teachers<sup>1</sup> A. NAGY, Princeton Plasma Physics Laboratory, R.L. LEE, General Atomics — Interactive classroom visits by scientists and engineers in the "Scientist in the Classroom" program and educator workshops led by Fusion Education team members continue to be the catalyst in the development of low cost, age appropriate, understandable physical demonstration models for use in classroom and workshop environments. Physical models developed for these interactive settings are based on topics in plasma science and technology, vacuum, thermodynamics, light, and electricity and magnetism. The physical models are actual hands-on devices students use to observe specific phenomena. One example uses a piston, a sealed volume, and a vacuum chamber to illustrate the ideal gas law. Another example uses liquid nitrogen to explore how temperature affects changes in states of matter, and, as a third example, magnets are used on simple plasma devices to illustrate the effects a magnetic field has on moving, charged particles. The details of these models will be presented. Three very successful "build-it" days have been sponsored that enable teachers to build these physics models for use in their own classrooms.

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