## Abstract Submitted for the MAR09 Meeting of The American Physical Society

## A New Graduate Minor Program in Computational Science LYLE

LONG, The Pennsylvania State University — This talk will discuss the need for graduate educational programs in computational science. Due to the continued increase in computer power, algorithms, and software the need for students trained in computational science has increased dramatically. Theoretical and experimental methods are still important, but there is an enormous need for students who understand numerical methods, programming, parallel computing, and software engineering. A new Graduate Minor program has been developed at Penn State and is now available to all graduate students (http://www.csci.psu.edu). The Ph.D. students are required to take two core courses (out of three possible), attend two seminar series, and choose two additional courses (which are often in their major). This is an extremely popular program, with 17 students graduating in the first two years and 75 more currently enrolled (primarily from various engineering and science departments). This program allows students to pursue a traditional M.S. or Ph.D. degree, but also acquire knowledge in computational science and receive credit for it. We believe this is a good alternative, rather than including this material as additional requirements to the traditional programs or developing new M.S. or Ph.D. programs in Computational Science.

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