Physics Department Seminar
Friday March 31\textsuperscript{st}, 2006
(Yes, we will have this guest join us on Cesar Chavez Day)
11:00am in PhSc 105

“Fusion Energy, Plasma Turbulence, and a Shifting Scientific Landscape”

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2005-06 APS/DPP Distinguished Lecturer

Abstract:
An important shift in perspective regarding fusion energy research and what is knowable about magnetically confined plasmas and turbulence took place in the last two decades. This talk travels along a particular slice of the history of plasma turbulence research that illustrates this shift. It culminates in a discussion of strategies for optimizing a magnetic fusion reactor through the manipulation of this turbulence. In addition, the prospects are good for using present experiments as test beds for theory tools that can be applied to certain astrophysical problems.