

CAPS COLLOQUIUM

Distinguished scientists in all disciplines are invited to lecture on topics of general interest. Objectives include the cross-fertilization of research initiatives at various institutions and the identification of possible uses of the Advanced Photon Source.

When: First Wednesday of each month at 3:00 p.m.

Where: Building 402, APS Auditorium

Refreshments served at 2:45 p.m.

July 7, 2004

John Schiffer

Physics Division, Argonne National Laboratory

"The Hafnium saga: Can radioactive decay be usefully controlled?"

John Schiffer has been at Argonne for a long time with a concurrent joint appointment as Professor of Physics at the University of Chicago over some of the period. He has worked mostly in nuclear physics (effective interactions, single particle states, reactions, etc.) and associated science, and on cold plasmas. He is a fellow of the American Physical Society, the American Association for the Advancement of Science, and a member of the National Academy of Science. He has served on and chaired a number of committees for DOE, NSF and NAS/NRC on nuclear physics and was a member of the DOE Cold Fusion Panel.

Abstract:

Reports of triggering of the decay of a nuclear isomer by x-rays have led to a great deal of speculation about possible applications. Experiments at the Advanced Photon Source have found no sign of such triggering. While this seemed to satisfy most of the scientific community, it did not satisfy some of those interested in the potential applications of such an effect. The talk will summarize the effect and the experiments, and how our society reacted to it.

<http://www.aps.anl.gov/conferences/APSColloquium>