Workshop Announcement:

CNR* 2007 Compound-Nuclear Reactions and Related Topics

22 – 26 October 2007 Tenaya Lodge at Yosemite National Park, Fish Camp, California, USA

First Circular – July 2007

Dear Colleague:

Compound-nuclear reactions play a crucial role for applications in various areas, such as nuclear astrophysics, nuclear energy, and national security. Even though the concept of the compound nucleus dates back to the 1930s, further research is still necessary in order to establish a comprehensive, quantitative picture of the processes involved in the formation and decay of a compound nucleus and to formulate accurate predictions for the associated cross sections.

The purpose of the workshop CNR* 2007 is to assess the status of knowledge of compound-nuclear reactions, to review current theoretical and experimental efforts aimed at understanding compound-nuclear reactions and determining the associated cross sections, to identify areas in need of development, and to outline possible strategies for addressing these needs. Topics of interest to CNR* 2007 include: Hauser-Feshbach theory, its limits and extensions; statistical averaging and fluctuation effects; doorway states, optical model; direct-reaction information needed for compound-nuclear reactions; pre-equilibrium reactions; compound-nuclear decays; fission; particle and gamma emission; level densities; strength functions; highly-excited nuclear states and resonances; nuclear structure information for compound-nuclear reaction descriptions; unstable targets, surrogate nuclear reactions; etc. The workshop will bring together experts in nuclear theory, experiment, and data evaluation. Sessions will be organized in a manner that encourages interaction between these groups and time will be allocated for discussions.

Pre-registration: The workshop will be limited in size. Please pre-register by returning the pre-registration form to Nancy Reason, the workshop secretary (reason2@llnl.gov), by **August 8**, **2007**.

Conference web site: http://cnr07.llnl.gov

We are looking forward to hearing from you, The organizing committee:

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