US ITER Forum
Activity Proposal Form

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What is the scope of your proposed activity? Integrated predictive modeling of ITER using theory-based models for transport and H-mode pedestal will be used to predict the fusion power production expected in ITER and to predict expected plasma profiles that are needed for more detailed studies of instabilities in ITER. Predictive modeling codes such as BALDUR using the Multi-Mode and GLF23 transport models, as well as the predictive capabilities that will be developed in collaboration with the Fusion Simulation Project, will be used to carry out simulations of ITER.

In which phase(s) would the activity be conducted?
X❏ Pre-construction (2003-5)   X❏ Construction (2006-13)   X❏ Research (2014-34)

In which phase(s) would the US benefit be realized?
X❏ Pre-construction (2003-5)   X❏ Construction (2006-13)   X❏ Research (2014-34)

What do you see as the US interest in the programmatic area of your proposed activity? We will use our integrated predictive modeling codes to help design ITER and to optimize the performance of ITER. Integrated modeling simulations will be used to plan experiments and to analyze the data in order to maximize the gain from the US investment in the ITER project.

For design and fabrication activities, what do you see as the US interest in performing the design and fabrication scope in your proposed activity?

Indicate the nature(s) of the proposed activity:
X❏   US preparations for Negotiations --- Evaluate expected ITER performance.
X❏   US preparations for the Construction Phase --- Influence the design of ITER.
X❏   US preparations for the Research Phase --- Explore optimization scenarios.

❏   R&D and design work
❏   Fabrication of US components/systems
X❏   Preparation of tools for the Research Operations Phase --- Advanced integrated modeling codes
X❏   Other: Carry out modeling to maximize the US investment in the ITER project.