

IEEE computer society

**IEEE COMMUNICATIONS SOCIETY** 



# Oakland-East Bay / Computer Society, ComSoc, and NPSS Joint Chapters Meeting

See also the IEEE GRID at: <a href="http://www.e-grid.net/">http://www.e-grid.net/</a>

**RSVP** promptly to **OEB-CS@ieee.org**, to enable us to timely provide a guest list to our host organization (Chevron).

Open to all interested East Bay Techies; IEEE membership is not required.

### Date: Tuesday June 7, 2011, 6-8PM

### Location: Chevron Bishop Ranch BR1-X, 6101 Bollinger Canyon, San Ramon, CA 94583, Main Auditorium. (Maps at OEB-NPSS website here.)

Come to a joint 3 chapter meeting with: Computer, Communications, and Nuclear and Plasma Sciences Society Chapters, for a presentation by Mr. John M. Fisher on the:

## National Ignition Facility (NIF) Control System

The Lawrence Livermore National Laboratory is home to the National Ignition Facility (NIF), a large-scale experimental facility for studying inertial confinement fusion. The NIF's 192-beam ultraviolet laser system and 10-meter diameter target chamber is controlled by 60,000 device control points. The Integrated Computer Control System (ICCS) enables efficient operation of the NIF. Based on a scalable software framework, ICCS is distributed over 1,600 processes on 1,000 computers throughout the NIF. Through these processes, operators at 14 operator stations can align and fire the laser in as little as four hours.

**Presenter's Bio:** Mr. John M. Fisher is a computer scientist at Lawrence Livermore National Laboratory's National Ignition Facility. He received his B.S. degree in Computer Science from the University of California, Davis, in 1992, and his M.S. in Computer Engineering from Santa Clara University in 1994. At NIF, he was team lead for graphical user interfaces for the Integrated Computer Control System (ICCS) for eight years. Mr. Fisher is currently section lead for ICCS Frameworks, and lead architect for NIF Controls and Information Systems. In 2009, he was a co-recipient of the LLNL Science and Technology Award, for development of the ICCS Experiment Automation System.

#### Meeting Agenda:

8 8	
6:00 – 6:30pm	Social Networking
6:30 – 8:00pm	Presentation
8:00pm	Adjourn

Contact: Tim J. Voss, IEEE OEB Computer Society Chairman, LLNL, 925-423-9000