



Workshop on Emergent Behavior (WEB 07) Agenda

Oak Ridge National Laboratory, CSE Division

Lockheed Martin Corporation

March 6-7, 2007

Bldg 5700, Room O304,

Oak Ridge National Laboratory, Oak Ridge, TN 37831

March 6, 2007

- 08:15 a.m. Meet at ORNL Visitor Center (Pickup visitor badges)
- 08:30a.m. Welcome/Introductions (Dr. Brian Worley)
- 08:45a.m. LMCO Areas of Interest and Research Overview
- 09:45a.m. Current Intelligent Agent and Future IA Initiatives (Dr. Thomas Potok)
- 10:30a.m. Overview of ORNL Modeling & Simulation Capability (Mike Taylor)
- Coffee Break (TBD)
- 11:15a.m. Behavior-based High Resolution Population Dynamics Modeling (Dr. Budhendra Bhaduri)
- 12:00p.m. Working Lunch (Brief Overview of ORNL CSED Complexity/ Emergent Behavior Research) (Dr. Thomas Potok)
- 01:00a.m. Self-Organization for Nano-Computation and Nano-Assembly (Dr. Bruce MacLennan, University of Tennessee)
- 01:45p.m. Swarm Intelligence: Bio-inspired Emergent Intelligence (Dr. Xiaohui Cui)
- 02:30p.m. Coffee Break
- 02:45p.m. Predictive Insights on Complex Nonlinear Processes and Unusual Behavior from Heterogeneous Data (Dr. Auroop Ganguly)
- 03:30p.m. Agile Logistics (Dr. Kalyan Perumalla)

March 7, 2007

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| 08:30 a.m. | Evolutionary Computation: Theory and Application (Dr. Robert Patton) |
| 09:15 a.m. | Understanding the Insurgent Emergent Behaviors Through Swarm Based Modeling (Dr. Xiaohui Cui) |
| 10:00a.m. | Coffee Break |
| 10:30a.m. | Intelligent Software Agents and Cluster Computing (ISAACC) (Mark Elmore) |
| 11:15a.m. | Panel Discussion in Emergent Behavior Research |
| 12:30 p.m. | Working Lunch |
| 01:30p.m. | Discussion/Identification of Potential Collaborations (Jim Treadwell) |
| 02:00 p.m. | Adjourn |