

Tuesday,
March 25, 2008

6:00pm to 8:00pm

Stevens Institute of
Technology

The Babbio Center
Room 122



The School of Systems and Enterprises
Presents

A NIGHT OF SYSTEMS THINKING

Event One: SSE Invited Talk

6:00 to 7:00pm

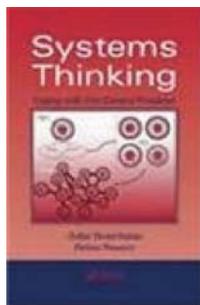


Guest Speaker: **Dr. Mihaela Ulieru**, *Canada Research Chair*
Seminar: *Systems Thinking for a Complex World*
Engineering the eNetwork DNA of Cyber-Physical Ecosystems

Abstract: How to craft the nervous systems of our eNetworked world to enable seamless evolution through challenging times and adaptation not only to meet the unexpected and survive it, but thrive on it? Wireless networks and nano-machines already blend the virtual and physical world in creative ways merging single devices / departments / enterprises into a larger and more complex infrastructure animating industrial, artistic, learning, scientific and other Cyber-Physical Ecosystems (CPE). Using the latest knowledge of complexity science a methodological framework for evolving large scale CPE will be introduced. e will unravel the 'eNetwork DNA' and put it to work similarly to how DNA molds the fundamental cells in natural systems such that they can evolve to accommodate gradual or abrupt change in the environment or internal operating conditions. Various applications will be presented among which: blackout-free electricity generation and distribution, optimization of energy consumption, disaster response through deployment of holistic security ecosystems, pandemic mitigation, networked transportation and manufacturing, environmental monitoring and sustainability assessment.

Event Two: Book signing, discussion and wine and cheese reception

7:00 to 8:00pm



Dr. John Boardman and Dr. Brian Sauser present their new book: *Systems Thinking: Coping with 21st Century Problems*

By examining the links and interactions between elements of a system, systems thinking is becoming increasingly relevant when dealing with global challenges, from terrorism to energy to healthcare. Addressing these seemingly intractable systems problems in our society, *Systems Thinking: Coping with 21st Century Problems* focuses on the inherent opportunities and difficulties of a systems approach.

Meet with the authors and join them for a book signing and wine cheese reception following Dr. Ulieru's presentation.

For more information about "A Night of Systems Thinking",
please contact **Beth Austin DeFares**, SSE, bdefares@stevens.edu

www.Stevens.edu/SSE