IEEE Systems Council
Long Island Chapter Inaugural Meeting

Election of Chapter Officers
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Talk on Systems Theory, Systems Thinking by Dr. Stephanie White, LIU-Post Senior Professor,
IEEE Systems Council Distinguished Lecturer, & President of IEEE Systems Council (2018-2019)
No fee, food will be served, Questions: contact Stephanie.White@liu.edu
6:00 PM, Wednesday, October 24, 2018, Lorber Hall, Rm 100, Long Island University, Post Campus

This talk discusses several important concepts in cybernetics, including organized complexity, transformation, feedback, and control. The talk concludes with a brief overview of three important systems thinking approaches: Jay Forrester's System Dynamics, Peter Checkland's Soft Systems Methodology (SSM), and Stafford Beer's Viable Systems Model (VSM). Using causal loops and System Dynamics, the analyst can model and simulate interactions among system elements and avoid emergent problems when a system or organization becomes operational. Using SSM, the analyst learns about the whole problem under study, the criteria for success, and all the influences and constraints. Using VSM the analyst diagnoses and controls the organization and works towards improving it.

Dr. Stephanie White is a Senior Professor at LIU-Post. She teaches a doctoral course in systems theory and undergraduate and master's level courses in computer science and systems engineering. Previously Stephanie was Principal Engineer of requirements and architecture for the Northrop Grumman Advanced Technology and Development Center in Bethpage. During her twenty-year career at Grumman and Northrop Grumman, she was a Principal Investigator on government-funded research contracts and transferred technology to aircraft and space programs. Dr. White serves on the IEEE Technical Activities Board and the IEEE Publication Services and Products Board. She received an IEEE-USA Award for inspiring women to work in STEM fields and for leadership in diversity initiatives.