

RISE Talks Series

- Who?** Fred Roberts, Director, Center for Computationally Informative Complex and Advanced Data Analysis, Rutgers University
- What?** Combined Cyber and Physical Attacks on the Maritime Transportation System
- When?** 12:00-1:00 on Wednesday, March 14
- Where?** Hall of Sciences, Room 326

For years, there has been discussion about physical security in the maritime transportation system (MTS). That discussion has led to standards, regulations, etc. In recent years, there has been an increasing interest in cyber security in the MTS that has led to discussions about best practices for cyber security. It is likely that many future attacks on the MTS (and other systems) will be multi-modal, including both a cyber and a physical component. As a simple example, hacking into security cameras at a port increases vulnerability to a physical intrusion. Thus, a cyber attack could be a precursor to a physical attack, and in fact the opposite could also be the case. This talk will present scenarios of combined cyber and physical attacks gleaned from interaction with a great many subject matter experts, and will describe ways to understand their likelihood based on ease of attack and seriousness of potential consequences.

Bio:

Fred Roberts is a Distinguished Professor of Mathematics at Rutgers University, where he is a member of seven graduate faculties, in Computer Science, Mathematics, Operations Research, Computational Molecular Biology, BioMaPS (Interdisciplinary Ph.D. Program at the Interface between the Biological, Mathematical, and Physical Sciences), Industrial and Systems Engineering, and Education.