

## **Decision analysis to improve homeland security**

**Keynote speaker: Detlof von Winterfeldt**

Two years after the 9/11 terrorist attack on the World Trade Center in New York, the US Department of Homeland Security selected and funded the first university based center of excellence, the National Center for Risk and Economic Analysis of Terrorism Events (CREATE). The mission of CREATE is to improve homeland security decisions to make the Nation safer. Researchers at CREATE advanced risk analysis, decision analysis and game theory to assess the risks posed by adaptive adversaries like Al Qaeda and ISIS and to find cost-effective solutions to reduce these risks. This presentation will provide a brief history of the work at CREATE and highlight some of the successes in applying risk and decision analysis to major homeland security problem. Examples include a risk and economic analysis of a dirty bomb attack on the Los Angeles Harbor, deciding whether to put surface to air missile defenses on all wide body commercial airplanes, and protecting infrastructure assets. We will discuss both successes and challenges of using decision and risk analysis to solve homeland security problems and whether these activities made our nation safer.