

Physics Department Seminar

Friday February 20th, 2004

11:00am in PhSc 105

“Detecting Radiation Threats in Intermodal Cargo Containers”



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Abstract:

We are working on a concept for a neutron interrogation system that can detect small targets of contraband fissile material in Intermodal cargo containers—roughly 5 kg HEU or 1 kg Pu—even when well shielded by thick cargo. It is essential that the concept be reliable and have low false-

positive and false-negative error rates. Interrogation must also be rapid to avoid interruption of commerce; analysis must be completed in minutes.