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**Science and National and International Security: the role of Physics in Non-proliferation and counter-terroism**

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Compliance with international agreements as well as detecting clandestine activities are often limited by the technical capabilities of those enforcing the agreements and national and international law. Further, some technological solutions may violate personal liberties, offend local cultural sensibilities or fail to have the desired detection specificity. Many of these solutions exploit fundamental physical properties to provide specific “signatures.” The ability to implement these “signatures” into effective monitoring schemes is one role science plays on the scene of national and international security.