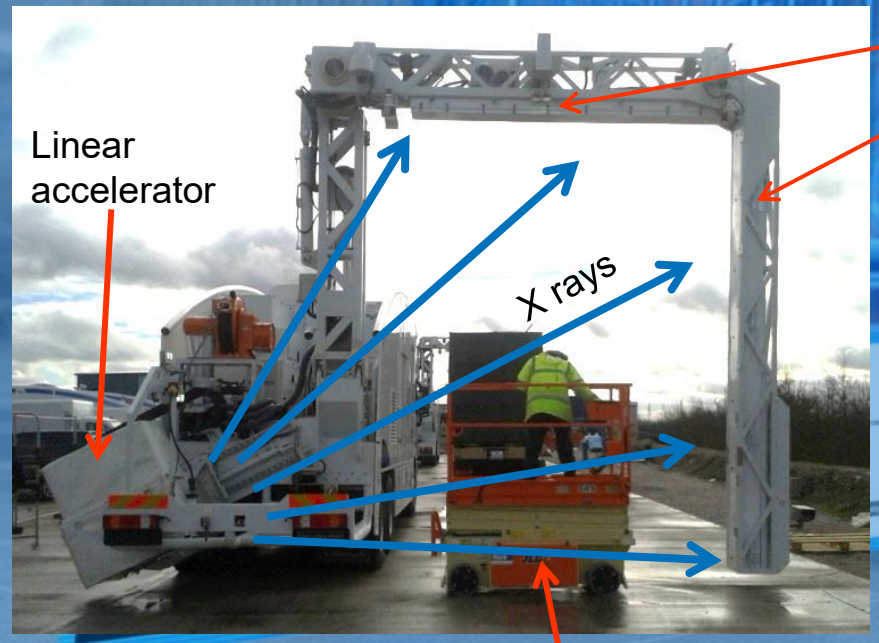
Science & Technology at Rapiscan

Dre Cristini

X-ray screening



Airport scanners

North of Stoke

CTH residency

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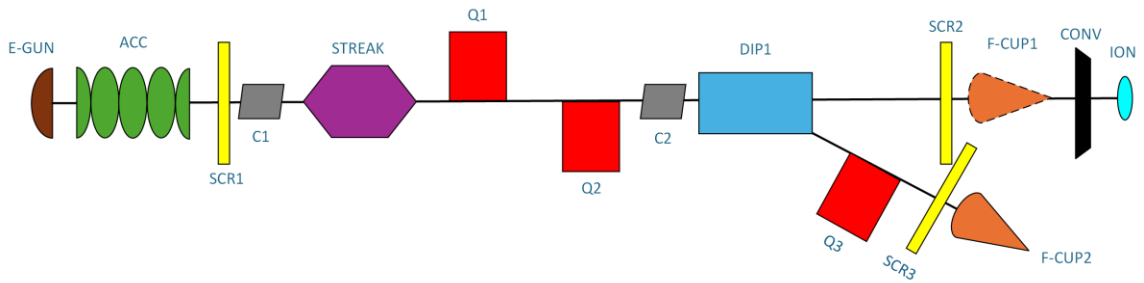
Innovators in NII

Rapiscan®

RF LINAC technology
- Compact form factor
- 6/4 MeV, up to 400Hz
- Highly collimated fan-beam

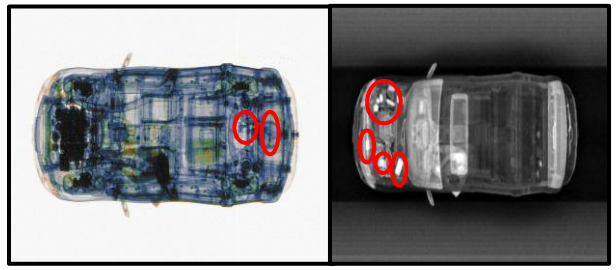
Electron test beamline (planned)
- Primarily for in-house developments
- Beam shaping experiments
- Many potential industrial applications



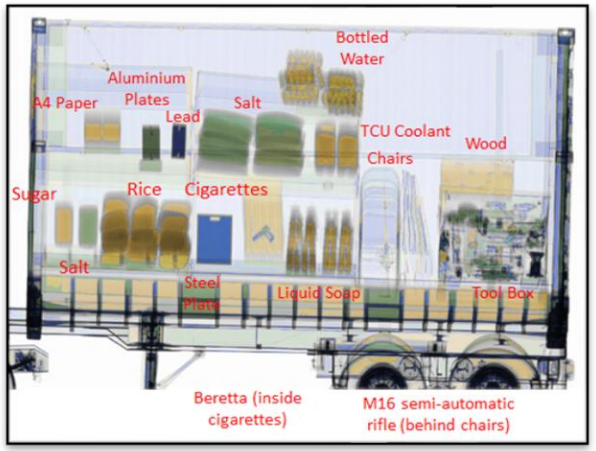
Test Facility – contract R&D

- Four radiation bunkers
- X-ray technology development
- Detector development
- Imaging research

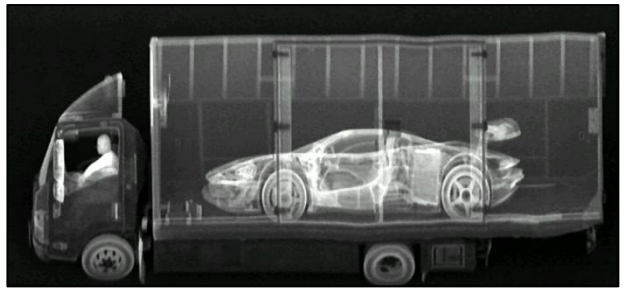
Research areas



Threat detection

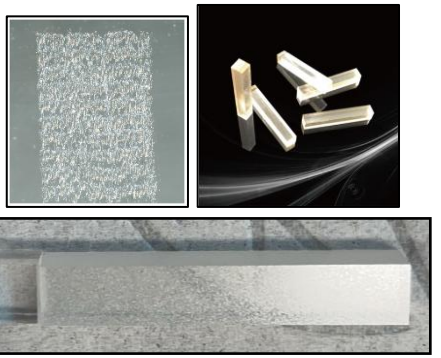


Material separation



Commodity grouping

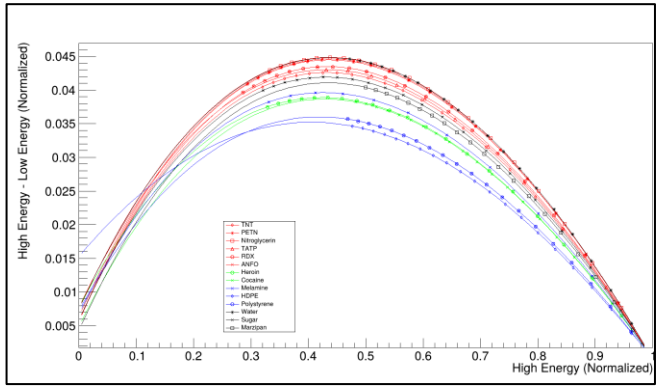
Rapiscan®



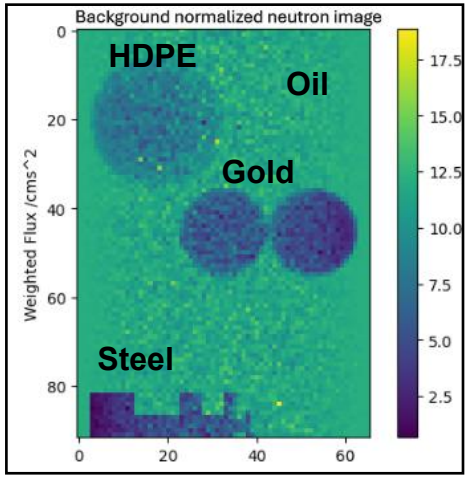
Crystal manipulation
(CdWO, LYSO, CdTe)

Phosphor screens
(BaFCl)

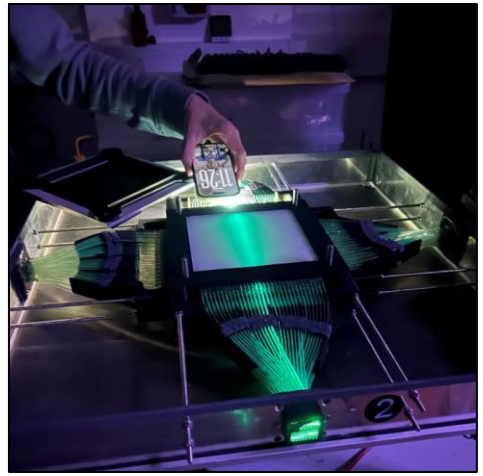
Image reconstruction
(CT)



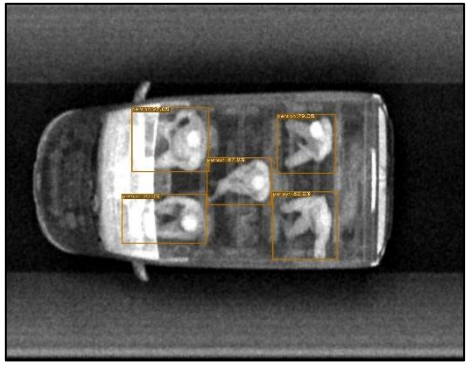
Spectroscopy (ASIC)



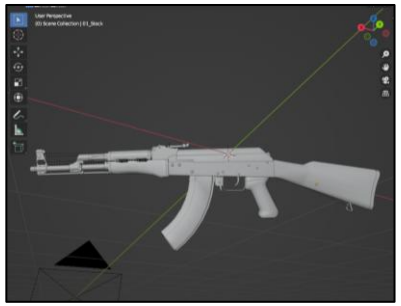
Neutron imaging



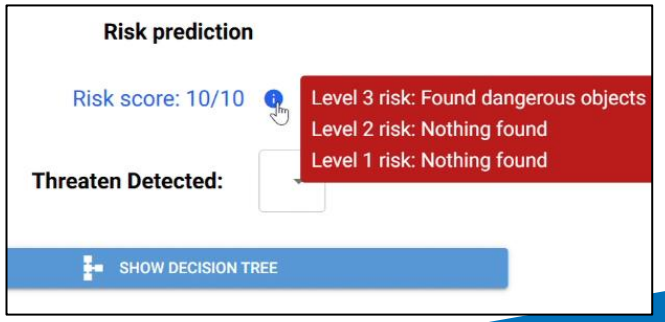
Novel detectors
(Liquid scintillator)



People counting



Threat Image Projection



Risk engine

SECURITY
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