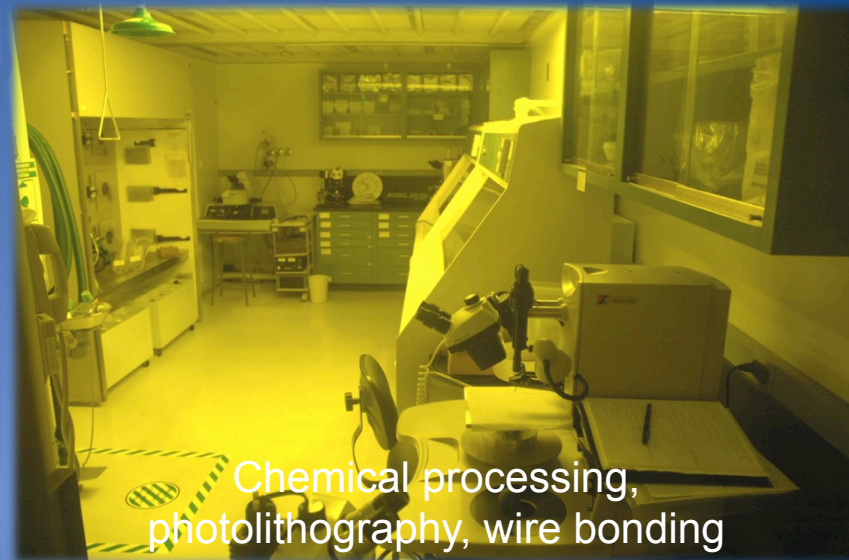
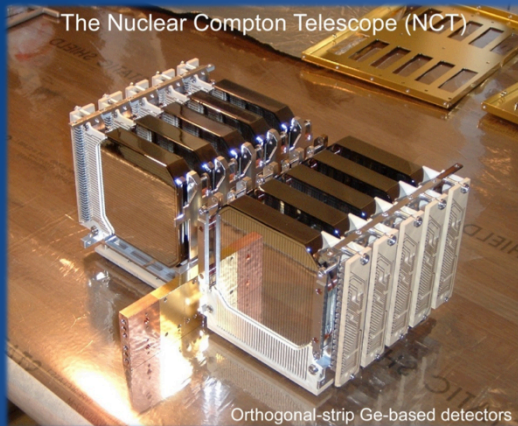


Semiconductor Detector Lab



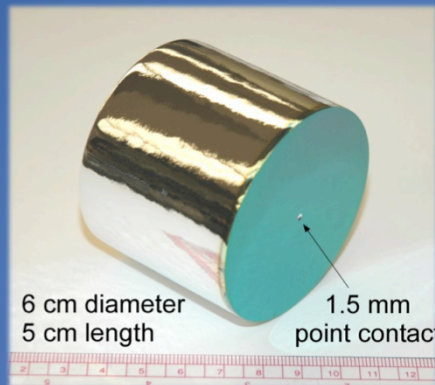
Infrastructure and expertise
for the development and
production of
semiconductor-based
radiation detectors and
detection systems

Semiconductor Detector Lab

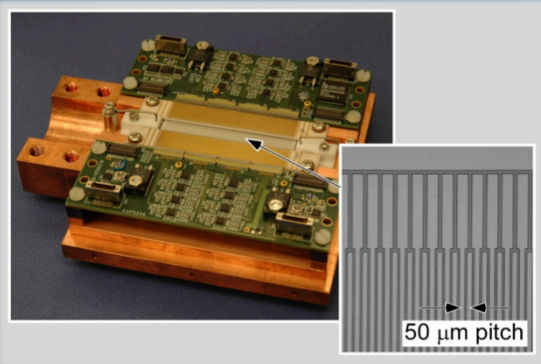


Ortho-strip Ge array for gamma tracking, imaging, and spectroscopy

Point-contact Ge for low-noise spectroscopy with multi-site event rejection



- **Facilities:** class 100 clean room, class 10,000 processing and testing area, mechanical processing area
- **Processes:** mechanical and wet chemical processing, thin film deposition, photolithography, wire bonding, detector characterization
- **Detector materials:** Ge, CdZnTe, and Si
- **Technologies:** diffused, implanted, surface barrier, and amorphous contacts; strip, orthogonal strip, point contact, and other unique configurations
- **Application areas:** nuclear science, space science, x-ray light source science, homeland security, nonproliferation, medical imaging



Strip Ge for light sources

CdZnTe array for gamma imaging and spectroscopy

