Given the remarkable advances in radiation detection and measurements achieved recently for a broad range of applications, this summer school aims at illustrating these advances and their impact as well as their drivers for these applications. It combines lectures from experts in their respective fields and tours of near-by facilities. This lecture series is initially set up as workshop with the focus on graduate students having some basic knowledge and experience in radiation detection. However, it is open to undergraduate students interested in this field as well. To reflect the international character students from Japan and the U.S. as well as elsewhere are invited. It is envisioned to convert this workshop into a summer course within the Departments of Nuclear Engineering of Univ. Tokyo and UC Berkeley.

**Lecturer:**
- Peter Denes (LBNL)
- Steve Derenzo (LBNL)
- Stefan Friedrich (LLNL)
- Bruce Hasegawa (UC San Francisco)
- Jennifer Huber (LBNL)
- Valentin Jordanov
- Menhard Kocsis (ESRF, France)
- I Yang Lee (LBNL)
- Paul Luke (LBNL)
- Bill Moses (LBNL)
- Hideo Murayama (NIRS, Japan)
- Graham Smith (BNL)
- Helmut Spieler (LBNL)
- Hidenori Toyokawa (Spring-8, Japan)
- Peter Vanier (BNL)
- Kai Vetter (UC Berkeley, LBNL)
- Albert Walenta (Univ. Siegen, Germany)
- Cornelia Wunderer (SSL Berkeley)

**Topics of Lectures:**
- Gamma-Ray Detection and Gamma-Ray Imaging for Basic and Applied Research
- Neutron Detection and Neutron Imaging
- Ultra-High Energy Resolution Detectors
- Ultra-High Position Resolution, Micro-Pattern Gas Detectors
- Scintillation Detection and New Materials
- Nuclear Medicine and Biomedical Imaging
- High-Energy Detectors and Associated Electronics
- Synchrotron Radiation and Applications
- Digital Signal Processing and Integrated Circuits in Nuclear Electronics

**Sponsor:**
- Univ. Tokyo – Nuclear Education and Research Initiative (GoNERI)

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