

**ELPH seminar**

講師： Professor Paul L. J. Guèye  
FRIB (Facility for Rare Isotope Beams)  
Michigan State University, US  
日時： 7月11日 (火) 15:00~16:30  
場所： 電子光理学研究センター三神峯ホール

**The power of complementary and adjustable lenses  
for a quest in understanding nuclei**

Electron scattering and rare isotopes are unique complementary techniques that provide powerful magnifying glasses to probe the interactions between nucleons inside nuclei. Over more than a quarter century, the 4 GeV and now 12 GeV (un)polarized electron beam of the Thomas Jefferson National Accelerator Facility (Newport News, Virginia, USA) has unraveled unprecedented insights into nuclear physics, including its unique program to understand elementary strangeness production.

On May 10, 2022, the Facility for Rare Isotope Beams (East Lansing, Michigan, USA) started its highly anticipated experimental nuclear astrophysics program, opening a new window into our current understanding of a large number of predicted unstable (neutron and proton rich) nuclei. Scientific discoveries have historically been rooted in the desire for some to take on a quest to tackle the unknown, often with relentless commitments and efforts, and sometimes bold actions that have proven to uncover new pathways.

This talk will provide some brief reviews on the role and successes as well as future prospects of nuclear physics experiments and theories at these facilities as they pertain to my journey in becoming a nuclear physicist, including programs to broaden participation for workforce development in nuclear science.

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