

MONDAY

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4:00 P.M.

RM 124 NSH

The Many Paths of Nuclear Science at LANL

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Nuclear physics and nuclear measurement techniques play a wide ranging role in the science and technology studies at Los Alamos National Laboratory (LANL). From measuring neutron capture reactions for the synthesis of the heavy elements to determining the neutron exposure on commercial airlines, from the basic science studies that underpin the nation's nuclear stockpile to developing and producing new radioisotopes for nuclear medicine, from designing detectors for next-generation satellites to training IAEA inspectors, expertise in nuclear science is essential.

I will discuss recent developments in neutron capture, both direct measurements at LANSCE and indirect measurements at Argonne, that play a role in both basic and applied nuclear physics. I will then expand the discussion to give a larger picture of the range of ways that nuclear physics expertise contributes to the scientific and technical mission at Los Alamos.