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Neutrons, Neutrinos and Nuclear Physics

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Two different neutral fermions were given the name “neutron” and each played a key role in the history of nuclear physics. The first “neutron” was soon renamed the “neutrino” by Fermi. Discovering the nature of the neutrino is key to understanding of the weak interaction and there are important consequences for astrophysics and cosmology. The discovery of the second neutron, that kept the name, signaled the beginning the modern era of nuclear physics. Research aimed at understanding the neutron remains an active area of nuclear and particle physics. I will review the current status of neutrons and neutrinos and speculate about what the future may bring.