

Physical Sciences & Engineering Seminar

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**“The New Muon g-2 Experiment:
Giving an old experiment a new spin”**

**Thursday, December 3, 2015 – 3:30 p.m.
Bldg. 241, Rm. D-172**

Since its discovery in the 1930s, the muon particle, the big cousin of the electron, has played an important role in particle physics. As an unstable particle, studies of its decay and other properties provided many insights into the fundamental principles that govern our universe. In recent years, the usage of the muon for particle and nuclear physics has undergone a revival and precision experiments with the muon are now a vital field in our community. In this presentation, I will introduce the muon, its properties and highlight its versatility in particle physics by some selected, short examples. With Argonne's deep involvement in the new Muon g-2 experiment at Fermilab, I will provide a few more details on one of the high-priority muon experiments that are built in the U.S to test our understanding of the universe. We will let the muon spin to find new physics!

Light refreshments will be served 15 minutes before talk.