

APR11-2011-000504

Abstract for an Invited Paper
for the APR11 Meeting of
the American Physical Society

**W.K.H. Panofsky Prize in Experimental Particle Physics Talk: Kaons Redux- Seeking New Physics
with Rare Decays of Kaons**

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Studies of rare decays of kaons have been important in establishing the current picture of particle physics and in constraining hypothetical new approaches which go beyond the Standard Model to deal with its known deficiencies. Experimental capabilities have increased in concert with theoretical understanding making this approach to searching for new physics more viable than ever and essential, even in the era of the LHC. In this talk, I will discuss the most interesting and incisive rare kaon decay experiments, particularly $K^+ \rightarrow \pi^+ \nu \bar{\nu}$ and $K_L^0 \rightarrow \pi^0 \nu \bar{\nu}$, emphasizing the prospects for major advancements in the near term and at future high intensity proton accelerators.