Particle Physics Seminar

Neutrino Masses: First Signal From SUSY!

Tuesday

December 6

4:00 P.M.

Rm 415 NSH

Dr. Seyda Ipek
Fermilab

We know neutrinos have mass, but we don't know how they get their masses. Many models augment the Standard Model with right-handed neutrinos, either Dirac or Majorana, to generate the neutrino masses. I will show that in R-symmetric supersymmetric models, the bino and its Dirac partner the singlino can play the role of right-handed neutrinos. In this mechanism the neutrino masses are generated in a very simple fashion. I will also discuss low and high energy constraints/signatures in this framework.