

Cal Poly Pomona Mathematics and Statistics
Department Colloquium

**Adinkras: Supersymmetry using graphs
and codes**

By

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Abstract: In 2004, physicists M. Faux and S. J. Gates invented diagrams called Adinkras to better understand supersymmetric theories and their dimensional reduction to one dimension. Discovering the range of possible Adinkras has led to a deeper understanding of supersymmetry, and suggests an approach to solving some questions such as the off-shell problem. At the same time, the story of this investigation makes contact with diverse areas of mathematics from algebraic topology to algebra to error-correcting codes. No previous knowledge of supersymmetry or particle physics is assumed in this talk.

Thursday, May 3rd, 2007, 12:05 – 12:50 p.m. in 8-156

Refreshments served at 12 noon.