## MIKE KNAPP, Loyola University Maryland

Sextic forms over extensions of  $\mathbb{Q}_2$ 

In this talk, we determine the minimum number of variables needed to guarantee that a homogeneous polynomial of the form  $a_1x_1^6+a_2x_2^6+\cdots+a_sx_s^6$  has a nontrivial zero in certain quadratic extensions of  $\mathbb{Q}_2$ .