Tomer Schlank:Â **Stable obstruction to degree one zero cycles.**

The Brauer-Manin obstruction is probably the best known obstruction to the existence of points on an algebraic variety. The BM obstruction can also be used to obstruct the existence of zero cycles (Galois invariant formal sums of geometric points). For rational points stronger obstruction exists. In 99' Skorobogatov defined the more refined etale-Brauer-Manin obstruction, which is a finer obstruction to the existence of such points. However, this obstruction cannot be applied to zero cycles . The theory of e'tale homotopy gives us a way to understand this fact. The difference between BM and e'tale-BM lies in the difference between homotopy and homology, and it is homology's abelian nature that allows to extend the obstruction. This suggest that an intermediate obstruction should exist in stable e'tale homotopy. We'll present such an obstruction and explain how to compute it. This is a work in progress with V. Stojanoska.