1094-20-321 **Philipp Perepelitsky*** (pperepel@ucsc.edu). *p-permutation equivalences between blocks of finite groups.*

In this talk we describe joint work with Robert Boltje. Let F be an algebraically closed field of positive characteristic p. Let G and H be finite groups. Let A be a block of FG and let B be a block of FH. A *p-permutation equivalence* between B and A is an element γ in the group of (A, B)-p-permutation bimodules with twisted diagonal vertices such that $\gamma \cdot_H \gamma^\circ = [A]$ and $\gamma^\circ \cdot_G \gamma = [B]$. A p-permutation equivalence lies between a splendid Rickard equivalence and an isotypy.

We introduce the notion of a γ-Brauer pair, which generalizes the notion of a Brauer pair for a p-block of a finite group. The γ-Brauer pairs satisfy an appropriate Sylow theorem. Furthermore, each maximal γ-Brauer pair identifies the defect groups, fusion systems and Külshammer-Puig classes of A and B. Additionally, the Brauer construction applied to γ induces a p-permutation equivalence at the local level, and a Morita equivalence at the level of the defect groups of A and B. (Received August 27, 2013)