
ALEXANDER GARVER, Université du Québec à Montréal

Wide shadows and biclosed sets

In recent work of Marks and Stovicek, they established a bijection between the torsion classes in the module category of a representation finite algebra and wide subcategories of the same module category. Given a gentle algebra A all of whose indecomposable modules are bricks, we study a family of subcategories of $\text{mod}(\Pi(A))$, where $\Pi(A)$ is as in the previous talk, that are intersections of wide subcategories of $\text{mod}(\Pi(A))$ with a certain subcategory of $\text{mod}(\Pi(A))$. We refer to these subcategories as wide shadows. We show that the shard intersection order of the lattice of torsion shadows is isomorphic to the poset of wide shadows. From this it follows that there is a bijection between torsion shadows of A and wide shadows of A . This is joint work with T. McConville and K. Mousavand.