GORDANA TODOROV, Northeastern University, Boston, Massachusetts, USA
m-cluster categories and m-replicated algebras

Let A be a hereditary algebra over an algebraically closed field. We prove that an exact fundamental domain for the m-cluster category of A is the m-left part of the m-replicated algebra $A^{(m)}$ of A. Moreover, we obtain a one-to-one correspondence between the tilting objects in the m-cluster category (that is, the m-clusters) and those tilting $A^{(m)}$-modules for which all non projective-injective direct summands lie in the m-left part of $A^{(m)}$.

Joint work with I. Assem, T. Brüstle and R. Schiffler.