

Algebra and Geometry Seminar

Speaker: Eric Hanson (LaCIM, Montreal)

Title: τ -perpendicular wide subcategories

Abstract: Let Λ be a finite-dimensional algebra. Jasso's τ -tilting reduction, later extended by Buan-Marsh, allows one to relate the τ -tilting theory of $\text{mod-}\Lambda$ to that of a certain type of subcategory. In this talk, we classify these subcategories using the notions of functorial finiteness and Serre subcategories. As an application, we give a definition of the " τ -cluster morphism category" of an arbitrary finite-dimensional algebra. This definition extends those of Igusa-Todorov (hereditary case) and Buan-Marsh (τ -tilting finite case). This talk is based on joint work with Aslak Bakke Buan.