Speaker: Eric Hanson (LaCIM, Montreal)

Title: $\tau$-perpendicular wide subcategories

Abstract: Let $\Lambda$ be a finite-dimensional algebra. Jasso's $\tau$-tilting reduction, later extended by Buan-Marsh, allows one to relate the $\tau$-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 "$\tau$-cluster morphism category" of an arbitrary finite-dimensional algebra. This definition extends those of Igusa-Todorov (hereditary case) and Buan-Marsh ($\tau$-tilting finite case). This talk is based on joint work with Aslak Bakke Buan.