Ample groupoid algebras

Lisa Orloff Clark
Victoria University of Wellington

A groupoid is a generalisation of a group in which the operation is only partially defined. Groupoids are very general objects that appear in a variety of different mathematical settings. In this course, we will begin with an introduction to ample groupoids and their associated algebras. Then we will show how different classes of examples can be realised as groupoid algebras, for example, Leavitt path algebras, Kumjian-Pask algebras and algebras associated to self-similar actions. Finally, we will present results demonstrating how the groupoid model has proven useful.