Lisa Orloff Clark Groupoids in analysis and algebra

Groupoid algebras are studied in both analytic and algebraic contexts. In analysis, groupoid C*-algebras play a fundamental role in the theory and include many important subclasses. Steinberg algebras are their purely algebraic analogues. They were introduced in 2010 (by B. Steinberg) and have proven themselves to be useful in unexpected ways.

In this talk, I demonstrate how groupoids and their associated algebras serve as a powerful tool for bridging the gap between abstract algebra and analysis. We will first explore this interplay in the context of graph algebras, and then broaden our scope to more general classes of groupoid algebras.