

1154-46-1893

Elizabeth Gillaspay* (elizabeth.gillaspay@mso.umt.edu), **Anna Duwenig**, **Rachael Norton**, **Sarah Reznikoff** and **Sarah Wright**. *Cartan subalgebras in the C^* -algebras of non-principal groupoids.*

When a C^* -algebra has a particularly nice abelian subalgebra known as a Cartan subalgebra, that C^* -algebra necessarily arises from a groupoid. (A groupoid is a generalization of a group where multiplication is only partially defined.) However, sometimes groupoid C^* -algebras admit unexpected Cartan subalgebras. This implies the existence of multiple different groupoid models for the same C^* -algebra. When does this happen, and how are these groupoids related? In this talk, we will consider an example of a 2-step nilpotent group for which these questions have intriguing answers, and (time permitting) discuss how this example fits into a broader context. (Received September 16, 2019)