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Title: An Introduction to Leavitt Path Algebras

Abstract: Leavitt path algebras provide a visual representation of many types of algebras including familiar examples such as matrices and Laurent polynomials as well as less-familiar examples such as the classical Leavitt algebras and the Toeplitz algebra. These algebras are constructed from a directed graph with many properties of the algebra arising from the shape of the corresponding graph. For example, a Leavitt path algebra is finite-dimensional if and only if its underlying graph is acyclic. This talk will provide an introduction to the field including many examples, a few basic theorems, and some open questions.