

Department of Mathematics

University of Houston

Analysis Seminar

FRIDAY, September 29, 2017

13:00-14:00 – Room 646 PGH

Speaker: Mark Tomforde (University of Houston)

Title: Classification of Graph Algebras

Abstract: Over the past two decades, graph C^* -algebras have emerged as a class of C^* -algebras that is simultaneously large and tractable. In addition to being used to define the construction, the graph provides useful tools for analyzing and codifying the structure of the associated C^* -algebra. Based on the success of this approach, researchers have also introduced algebraic counterparts of the graph C^* -algebras, known as Leavitt path algebras, for which many similar results have been obtained. In the past few years great strides have been made in the classification of graph algebras, including results for both the graph C^* -algebras and Leavitt path algebras. These classification results have illuminated the relationships among not only the graph, the algebra, and the C^* -algebra, but also among related objects such as the graph groupoid, the shift space of the graph, and the diagonal subalgebra of the C^* -algebra. This talk will survey recent results for the classification of graph C^* -algebras and Leavitt path algebras. We will discuss the significance of these results and also describe some open problems and questions remaining to be answered.