Rebin A. Muhammad* (rm775311@ohio.edu), Pinar Aydogdu (paydogdu@hacettepe.edu.tr) and Sergio Lopez-Permouth (lopez@ohio.edu). On Two-Value Graph Algebras.

In this research we introduce a family of algebras, which we call it two-value graph algebras. We use this new algebras to answer questions related to study of a new topic which is called modules over infinite dimensional algebras. In particular, we show that there is a family of algebras which have simple bases up to congeniality but do not have any projective basis. We will explore amenability of bases in two-value graph algebras and characterize all basic graphs that give a commutative two-value algebras. (Received September 16, 2019)