

Abstract

This thesis is an introduction to the study of Koszul algebras. We give enough theory to state the definition of Koszul algebras. After giving the definition we discuss Koszul duality, we compare two ways of defining the Koszul dual algebra of a quadratic algebra and show that they are equivalent. One important result for Koszul algebras is that their Hilbert series and the Hilbert series of their Koszul dual algebras satisfy a certain relation which we prove in this thesis.