

Graph theoretic proof of the Amitsur-Levitzki theorem

Geir Agnarsson, George Mason University, Fairfax, VA – 22030

Abstract

It is rather unusual that one can prove a non-trivial algebraic result by using some very basic graph theoretic concepts (usually it is the other way around!) – In this talk I introduce PI-algebras and show how one can prove the Amitsur-Levitzki Theorem using some basic graph theory. This approach is due to Bollobás.

Keywords: PI-algebra, standard polynomial, graph.