1139-16-190   **Alexander H Sistko*** (`alexander-sistko@uiowa.edu`), 14 MacLean Hall, Iowa City, IA 52242-1419, and **Miodrag C Iovanov**. *Maximal Subalgebras of Finite-Dimensional Algebras with Applications.*

We present classification theorems for maximal subalgebras of finite-dimensional algebras over a field. For important classes of algebras (ex. basic over an algebraically closed field), this gives us nice presentations of (maximal) subalgebras. Trivial extensions and separable extensions arise naturally in the classification, allowing us to relate representation-theoretic properties of an algebra to those of its subalgebras via induction and restriction. We discuss applications of our classification to the study of finite-dimensional algebras, extensions between them, and automorphisms of algebras. (Received February 09, 2018)