

1135-16-2904

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52242-1419, and **Miodrag C Iovanov**. *Maximal Subalgebras of Finite-Dimensional Algebras*.

We present classification theorems for maximal subalgebras of finite-dimensional algebras over a field k . This is done by classifying maximal subalgebras of semisimple algebras, and then lifting to the general case. When k is nice (ex. algebraically closed), the classification can be understood in terms of the ideal structure of the Jacobson radical. For bound quiver algebras, this gives us nice presentations of subalgebras. Trivial extensions and separable extensions feature prominently in the classification, allowing us to relate representation-theoretic properties of an algebra to those of its subalgebras via induction and restriction. If time permits, we discuss potential applications, ex. to determining isomorphism classes of subalgebras, and minimal generating sets of algebras. (Received September 26, 2017)