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**Miodrag C Iovanov\*** (miodrag-iovanov@uiowa.edu), IA. *The tame-wild dichotomy for infinite dimensional algebras and Brauer-Thrall 3 conjectures*. Preliminary report.

A classical result of Drozd which sits at the foundations of representation theory of finite dimensional algebras states that every such algebra is either tame or wild, but not both. Whether this dichotomy holds for infinite dimensional algebras is an important open question, which is formulated more generally in the language of coalgebras, and is conjectured true by D. Simson, who proved this in special cases. We present an approach and solution to this question, as well as to another conjecture called the Brauer Thrall 3 conjecture, on existence of indecomposables of arbitrarily large infinite dimension, also due to Simson. We will present the basic definitions and setup, and give the results; time permitting, we also present some related questions on the representation type of Hopf algebras. (Received September 26, 2017)