

Three fundamental theorems on representations of associative algebras

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Let k be an algebraically closed field. Let A be an associative k -algebra with an identity, which is finite dimensional (as a vector space over k). An interesting problem is to describe the category of finite dimensional (left or right) A -modules. During the talk we present bound quivers introduced by Gabriel, almost split sequences introduced by Auslander and Reiten, and Drozd's wild-tame dichotomy. These results had a big impact on the development of the representation theory of associative algebras over last forty years.