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Stable representations of quivers. (English) [Zbl 1040.16011]
J. Pure Appl. Algebra 172, No. 2-3, 205-224 (2002).

Summary: Let Q be a finite quiver without oriented cycles and let kQ be the path algebra of Q over an algebraically closed field k. We investigate stable finite-dimensional representations of Q. That is for a fixed dimension vector d and a fixed weight θ we consider θ-stable representations of Q with dimension vector d. If we wish to compare also representations with different dimension vectors, then it is more convenient to consider a slope μ instead of a weight θ. In particular, we apply the results of Harder-Narasimhan on natural filtrations associated to any fixed slope μ to the category of representations of Q. Further we introduce the wall system for weights with respect to a fixed dimension vector d and consider several examples.

MSC:

16G20	Representations of quivers and partially ordered sets

Cited in **9** Documents

Keywords:

finite quivers; path algebras; stable representations; weights; slopes; filtrations; categories of representations

Full Text: DOI

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