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Generic extensions of posets representations (25- 30)

Let K be an algebraically closed field and let I be a finite poset (ie. partially ordered set). The main aim of this talk is to present some results of generic extensions of projective modules over the incidence K -algebra KI of the poset I . We prove that, for posets of finite projective type, there exist generic extensions of projective modules. Moreover we describe the monoid of generic extensions of projective modules. For a Dynkin quiver the monoid of generic extensions is described by generators and relations. Moreover, connections of this monoid with Hall algebras of Dynkin quivers, quantum groups and semisimple Lie algebras are known (results of Bongartz, Reineke, Ringel ...).