The Krull—Gabriel dimension of discrete derived categories

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It is well-known that the Krull—Gabriel dimension of the category of modules reflects the representation type of an algebra. More precisely, an algebra is of finite representation type if and only if the Krull—Gabriel dimension of its module category equals 0 (and there is no algebra such that the Krull—Gabriel dimension of its module category equals 1). In the context of derived categories a new phenomenon appears: algebras with discrete derived categories first studied by Vossieck. In a *joint work with Henning Krause* we have calculated the Krull—Gabriel dimension of the derived categories of the derived discrete algebras. In particular, we have investigated whether this class of algebras can be distinguished via the Krull—Gabriel dimension of the associated derived categories.

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