(m, n)-Quasitilted and (m, n)-Almost hereditary algebras

Edson Ribeiro Alvares

Universidade Federal do Paraná

Abstract

We propose a generalisation to quasitilted and almost hereditary algebras, introducing two parameters that arise naturally, which we call (m, n)-quasitilted and (m, n)-almost hereditary. On the one hand, when dealing with the generalisation of quasitilted algebras, these parameters controls the quantity of tilting and cotilting processes. On the other hand, for the generalisation of almost hereditary algebras, these parameters controls projective and injective dimensions of the indecomposable modules. In both cases, the global dimension of the algebra is the sum of these parameters. Differently from case $m = n = 1$, not all (m, n)-almost hereditary are (m, n)-quasitilted algebras, although the converse holds true. In this talk, we present some results that can be obtained for these classes of algebras, including a discussion about one-point extension of $(m, 1)$-almost hereditary algebras.