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Title : Topological invariants of piecewise hereditary algebras:

In the eighties, Riedtmann, Bongartz and Gabriel defined the notion of Galois
covering of an algebra. This has introduced a new point of view in
representation theory by considering algebras as topological spaces. Since
then, there have been many results on algebras, which correspond to classical
results from topology. In this talk, we explain how the notion of Galois
covering gives rise to a derived invariant, the universal cover, in the case of
piecewise hereditary algebras. As a corollary, we shall see that the vanishing
of the first Hochschild cohomology group characterises the simple connectedness
of the algebra, in the piecewise hereditary case. This characterisation was
first conjectured by Skowronski for tame triangular algebras.