



Special biserial algebras with no outer derivations

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Let A be a special biserial algebra over an algebraically closed field. We show that the first Hochschild cohomology group of A with coefficients in the bimodule A vanishes if and only if A is representation finite and simply connected (in the sense of Bongartz and Gabriel), if and only if the Euler characteristic of Q equals the number of indecomposable non uniserial projective injective A -modules (up to isomorphism). Moreover, if this is the case, then all the higher Hochschild cohomology groups of A vanish.

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