

# RINGS WITH PATOLOGICAL MATRIX RINGS

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An ultramatrix algebra is a union of an increasing sequence of finite products of matrix algebras. The matrix type of an algebra is the equivalence relation on positive integers such that  $n$  and  $m$  are equivalent if and only if the  $n \times n$  matrix ring over the algebra is isomorphic to the  $m \times m$  matrix ring. Answering a question of Pter Vmos, we completely classify the matrix types of ultramatricial algebras. The main part is based on Corner's construction of modules with prescribed endomorphism rings, which I have learned from Rüdiger Göbel.

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