

Matrix and Clifford algebras

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Abstract

Since many Clifford algebras are matrix algebras over the field of real or complex numbers, recognizing when an algebra over these fields is a matrix algebra is essential in the study of Clifford algebras. In this talk we will discuss some fairly recent criteria for characterizing matrix algebras and matrix rings in general. Some applications are presented, in particular to differential operator rings and Clifford algebras. – This is, in part, joint work with the late Shimshon Avraham Amitsur, J. Chris Robson and Samuel Mendelson. This talk is based on a talk given at the JMM 2026 in Washington DC.

Keywords: rings, matrices, differential algebras, Clifford algebras.