Some properties of evolution algebras. (English summary)


Evolution algebras have brought some interesting ideas to traditional algebraic theory. This article studies finite-dimensional complex evolution algebras. In particular, it describes a class of algebras isomorphic to evolution algebras with Jordan form matrices and a criterion for their nilpotency. When the eigenvalue of the corresponding Jordan block is zero, the article gives the criterion of nilpotency of the corresponding finite-dimensional complex evolution algebras. The article also provides an interesting result that for nilpotent $n$-dimensional complex evolution algebras the possible maximal nilpotency index is $1 + 2^{n-1}$.

References


Note: This list reflects references listed in the original paper as accurately as possible with no attempt to correct errors.

© Copyright American Mathematical Society 2015