Les algèbres de Lotka-Volterra. (French) [Lotka-Volterra algebras]

The authors study the properties of nonassociative algebras over fields of characteristic \( \neq 2 \), associated to differential Lotka-Volterra systems with binary interaction. This kind of differential system allows a representation by means of an antisymmetric matrix whose coefficients are involved with the multiplication over the algebra concerned, obviously a baric algebra.

The fundamental outcome of this work allows the authors to set up the conditions for the coefficients of the aforementioned antisymmetric matrix, specifically the condition \( a_{ij} = 0 \), with the objective that the Lotka-Volterra associated algebra be genetic (Gonshor algebra).

{For the entire collection see MR1055600 (90m:17045)}

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