
MR978389 (90a:17022) 17D92**Ouattara, Moussa****★Algèbres de Jordan et algèbres génétiques. (French) [Jordan algebras and genetic algebras]**

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This work is based on the author's doctoral thesis. In it he studies those Jordan algebras that also belong to one of the classes of nonassociative algebras that arise in the algebraic study of genetics. In §2 he discusses Jordan train algebras, giving a complete classification up to dimension 4, where there are 33 nonisomorphic cases over the complex field, and 37 over the real field. §4 is devoted to Jordan gametic algebras, confirming the fact that there are only a small number of possibilities. §5 treats the Jordan Bernstein algebras. A large number of detailed results are given in this case, relating particularly to the automorphisms and derivations of the algebras. Here the interaction with Lyubich's broad classification of Bernstein algebras is fruitfully exploited. In the last section, the role of noncommutative Jordan algebras in genetics is explored. The work is quite self-contained, including brief expositions of the necessary theory of Jordan and genetic algebras. *P. Holgate*

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