

Jordan Superalgebras of Small Dimensions

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Abstract

We classify Jordan superalgebras of small dimensions over an algebraically closed field of characteristic different of 2. Our main motivation to obtain such classification comes out from the intention to give an answer to the problem of determining the minimal dimension, namely d , of exceptional Jordan superalgebras posed [1] by M. C. López- Díaz, I. P. Shestakov and S. Sverchkov. Our strategy to provide a lower bounded for this dimension is to determine the complete list of Jordan superalgebras of small dimensions and verify which ones are special or exceptional. Until the present time we have proved that $5 \leq d \leq 7$.

References

- [1] M. C. López-Díaz, I. Shestakov, and S. Sverchkov, On speciality of Bernstein Jordan algebras, *Communications in Algebra*, 28 (2000), pp. 4375-4387.