Seminários Contínuos do Programa de Pós-Graduação em Matemática

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On Exceptional Jordan superalgebras.

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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 in [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 $5 \leq d \leq 7$.

[1] M Concepción López-Díaz, Ivan Shestakov, and Sergei Sverchkov, "On Speciality of Bernstein Jordan Algebras", Communications in Algebra **28**, 9 (2000), pp. 4375–4387.