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On classification of m-dimensional algebras (Conference Paper)

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Abstract

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A constructive approach to the classification and invariance problems, with respect to basis changes, of the finite dimensional algebras is offered. A construction of an invariant open, dense (in the Zariski topology) subset of the space of structure constants of algebras is given. A classification of all algebras with structure constants from this dense set is given by providing canonical representatives of their orbits. A finite system of generators for the corresponding field of invariant rational functions of structure constants is shown. © Published under licence by IOP Publishing Ltd.

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1 Michel, G., Elisabeth, R.
(2011) *African J. Math. Phys.*, 10, pp. 81-91. Cited 2 times.

2 Durán, D.R.
(2003) *Lin. Alg. Appl.*, 364, pp. 1-12.

3 Encinas, L.H., Del Rey, A.M., Masqué, J.M.
Non-degenerate bilinear alternating maps f : V × V → V, dim(V) = 3, over an algebraically closed field

(2004) *Linear Algebra and Its Applications*, 387 (1-3 SUPPL.), pp. 69-82. Cited 2 times.
doi: 10.1016/j.laa.2004.01.019

View at Publisher

4 Popov, V.
(2011)
arXiv:1411.6570

5 Bekbaev, U.
On a classification of finite dimensional algebras with respect to the orthogonal (unitary) changes of basis

(2016) *Journal of Physics: Conference Series*, 697 (1), art. no. 012005.
http://www.iop.org/EJ/journal/conf
doi: 10.1088/1742-6596/697/1/012005

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