

Scopus

Document details

< Back to results | 1 of 1

[Export](#)
[Download](#)
[Print](#)
[E-mail](#)
[Save to PDF](#)
[Add to List](#)
[More... >](#)
[Full Text](#)[View at Publisher](#)

Journal of Physics: Conference Series

Open Access

Volume 819, Issue 1, 3 April 2017, Article number 012012

37th International Conference on Quantum Probability and Related Topics, QP 2016; Faculty of Science of the International Islamic University Malaysia Kuantan; Malaysia; 22 August 2016 through 26 August 2016; Code 127147

On classification of m-dimensional algebras (Conference Paper)

Bekbaev, U. [✉](#) [👤](#)

Department of Science in Engineering, Faculty of Engineering, International Islamic University Malaysia, P.O. Box 10, Kuala Lumpur, Malaysia

Abstract

[View references \(5\)](#)

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.

Indexed keywords

Engineering
controlled terms:

Rational functions

Basis changes

Canonical
representativesConstructive
approach

Finite systems

Finite-dimensional
algebras

Structure constants

Engineering main
heading:

Algebra

ISSN: 17426588

Source Type: Journal

Original language: English

DOI: 10.1088/1742-6596/819/1/012012

Document Type: Conference Paper

Volume Editors: Mukhamedov F., Accardi L., Pah C.H.

Sponsors:

Publisher: Institute of Physics Publishing

Metrics ⓘ

0 Citations in Scopus

0 Field-Weighted
Citation Impact

PlumX Metrics

Usage, Captures, Mentions,
Social Media and Citations
beyond Scopus.

Cited by 0 documents

Inform me when this document
is cited in Scopus:[Set citation alert >](#)[Set citation feed >](#)

Related documents

Complete classification of two-
dimensional algebrasAhmed, H. , Bekbaev, U. ,
Rakhimov, I.
(2017) *AIP Conference
Proceedings*On a classification of finite
dimensional algebras with
respect to the orthogonal
(unitary) changes of basisBekbaev, U.
(2016) *Journal of Physics:
Conference Series*View all related documents based
on referencesFind more related documents in
Scopus based on:[Author >](#) [Keywords >](#)

References (5)

[View in search results format >](#)☐ All[Export](#)[Print](#)[E-mail](#)[Save to PDF](#)[Create bibliography](#)

- ☐ 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 $f: V \times V \rightarrow V$, $\dim(V) = 3$, 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
[View at Publisher](#)

✉ Bekbaev, U.; Department of Science in Engineering, Faculty of Engineering, International Islamic University Malaysia, P.O. Box 10, Kuala Lumpur, Malaysia; email: bekbaev@iiu.edu.my
© Copyright 2017 Elsevier B.V., All rights reserved.

[Back to results](#) | 1 of 1

[Top of page](#)

About Scopus

What is Scopus
Content coverage
Scopus blog
Scopus API
Privacy matters

Language

日本語に切り替える
切换到简体中文
切换到繁體中文
Русский язык

Customer Service

Help
Contact us

ELSEVIER

[Terms and conditions](#) [Privacy policy](#)

Copyright © 2017 Elsevier B.V. All rights reserved. Scopus® is a registered trademark of Elsevier B.V.

Cookies are set by this site. To decline them or learn more, visit our [Cookies page](#).

RELX Gr