

# Recent Trends in the Research of the Theory of Representation of Algebras and its Application.

AGUSTÍN MORENO CAÑADAS<sup>1</sup>

## Abstract

Brauer configuration algebras were introduced by Green and Schroll as a way to deal with the research of algebras of wild representation type [1]. In this talk, Brauer configuration algebras are used to categorify (in the sense of Ringel and Fahr [2, 3]) magic squares and to generate schemes of visual cryptography.

## References

- [1] E.L. GREEN AND S. SCHROLL, *Brauer configuration algebras: A generalization of Brauer graph algebras*, Bull. Sci. Math, **147** (2017), 539-572.
- [2] C. M . RINGEL AND P. FAHR, *Categorification of the Fibonacci Numbers Using Representations of Quivers*, Journal of Integer Sequences, **15** (2012), no. 12.2.1.
- [3] C. M . RINGEL AND P. FAHR, *A Partition Formula for Fibonacci Numbers*, Journal of Integer Sequences, **11**, (2008), no. 08.14.

---

<sup>1</sup>Department of Mathematics, National University of Colombia, e-mail: amorenoca@unal.edu.co.