

# NUT GRAPHS WITH A PRESCRIBED AUTOMORPHISM GROUP

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A core graph is a simple graph whose adjacency matrix has a kernel eigenvector with no zero entries (i.e. a full eigenvector). A *nut graph* is a core graph of order at least 2 whose nullity is 1. We show that every finite group can be represented as the automorphism group of infinitely many nut graphs. Moreover, we show that such nut graphs exist even within the class of regular graphs.

This is joint work with Patrick W. Fowler (University of Sheffield, UK).

## References

- [1] N. Bašić, P. W. Fowler, Nut graphs with a given automorphism group, *J. Algebr. Comb.* **61** (2025) Art. no. 17, doi:10.1007/s10801-025-01389-4.