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*The Shrikhande Graph on the Crossroads of Algebraic and Topological Graph Theory*

The Shrikhande graph  $Sh$  is the smallest strongly regular graph which is not a rank 3 graph. Its automorphism group  $G$  has order 192. We consider  $Sh$ , its toroidal dual (the Dyck graph), and the dual of its Petrie dual. The action of  $G$  (or of a subgroup) on the vertex sets of these graphs defines a coherent configuration of order 60 with three fibres of size 16, 32, and 12. Using computer algebra packages we investigate some non-Schurian association schemes that appear as mergings of these coherent configurations and give combinatorial descriptions. (Joint work with Mikhail Klin, Be'er Sheva).