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AUTOMORPHISMS OF STRONGLY REGULAR GRAPHS WITH PARAMETERS $(1305, 440, 115, 165)$

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A graph Γ is called *t-isoregular* if, for any $i \le t$ and any i-vertex subset S, the number $|\Gamma(S)|$ depends only on the isomorphism class of the subgraph induced by S. A graph Γ on v vertices is called *absolutely isoregular* if it is $(v-1)$-isoregular. It is known that each 5-isoregular graph is absolutely isoregular, and such graphs have been fully described. Each exactly 4-isoregular graph is either a pseudogeometric graph for $\mathrm{pG}_r(2r, 2r^3+3r^2-1)$ or its complement. By Izo(r) we denote a pseudogeometric graph for $\mathrm{pG}_r(2r, 2r^3+3r^2-1)$. Graphs Izo$(r)$ do not exist for a infinite set of values of r $(r = 3, 4, 6, 10, \ldots)$. The existence of Izo(5) is unknown. In this work we find possible automorphisms for the neighborhood of an edge from Izo(5).

Keywords: isoregular graph, strongly regular graph, pseudogeometric graph.

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