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ON AUTOMORPHISMS OF A DISTANCE-REGULAR GRAPH WITH INTERSECTION ARRAY $\{39, 36, 1; 1, 2, 39\}$

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Possible prime-order automorphisms and fixed-point subgraphs are found for a hypothetical distance-regular graph with intersection array $\{39, 36, 1; 1, 2, 39\}$. It is shown that graphs with intersection arrays $\{15, 12, 1; 1, 2, 15\}$, $\{35, 32, 1; 1, 2, 35\}$, and $\{39, 36, 1; 1, 2, 39\}$ are not vertex-symmetric.

Keywords: distance-regular graph, graph automorphism.

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