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*A class of latin squares derived from finite abelian groups*

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**Abstract:** We consider two classes of latin squares that are prolongations of Cayley tables of finite abelian groups. We will show that all squares in the first of these classes are confirmed bachelor squares, squares that have no orthogonal mate and contain at least one cell though which no transversal passes, while none of the squares in the second class can be included in any set of three mutually orthogonal latin squares.

**Keywords:** latin squares; bachelor squares; monogamous squares; prolongation

**AMS Subject Classification:** 05B15

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