

A Class of Tricyclic Steiner Triple Systems

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A Steiner triple system on v points, denoted $STS(v)$, is said to be tricyclic if it admits an automorphism whose disjoint cyclic decomposition consists of three distinct cycles. We show that the necessary conditions for tricyclic Steiner triple systems with the smallest cycle of length 3 that contain a bicyclic subsystem are also sufficient.

Keywords: automorphism, tricyclic, Steiner triple system