

Steiner Triple Systems of Order 21 with Subsystems

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The smallest open case for classifying Steiner triple systems is order 21. A Steiner triple system of order 21, an STS(21), can have subsystems of orders 7 and 9, and it is known that there are 12,661,527,336 isomorphism classes of STS(21) with sub-STS(9).

In this talk, we present the case of STS(21) with sub-STS(7); there are 116,635,963,205,551 isomorphism classes of such systems.

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