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# On closed form expression of AME states with minimal support

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## Abstract

Every absolutely maximally entangled (AME) state corresponds to error correcting code [1]. In particular, there is a duality between AME states with minimum possible number of terms (minimal support) and the classical maximum distance separable (MDS) error correcting codes [2, 3]. One aspect of this duality provides an improved understanding of AME states, and leads to a significant progress in formulating the closed form expression of AME states with minimal support. In this talk I will introduce a wide class of closed form expression of AME states with minimal support by exploiting the correspondence method of MDS code. Also, I will illustrate the use of this method can lead us to find Bell basis and Stabilizer group of the AME states with minimal support in a systematic way.

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