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On a minimal set of separable measurements for a pure state determination in a two-qubit system.

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On a minimal set of separable measurements for a pure state determination in a two-qubit system.

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In this note I will address the problem of minimum set of separable measurements necessary to determine a pure s

 $\{\,\sigma_{-}x\otimes I,\sigma_{-}y\otimes\sigma_{-}x\;,\sigma_{-}y\otimes\sigma_{-}y\;,\sigma_{-}y\otimes\sigma_{-}z\;,\sigma_{-}z\otimes\sigma_{-}x\;,\sigma_{-}z\otimes\sigma_{-}y\;,\sigma_{-}z\otimes\sigma_{-}z\,\}$

does not. It is shown, by construction, that this particular choice of operators is inadequate. Some other possible solutions are discussed.

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