Minimal subspaces for topological tensors

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Abstract

The representation formats for tensors can often been analysed by the minimal subspaces of the represented tensor with respect to a subset of directions. In numerical calculations only algebraic tensors appear and their minimal subspaces can be characterised in a satisfactory way. On the other hand, the definition of minimal subspaces can be generalised for topological tensors. For a general Banach space setting there are simple questions which surprisingly do not have a simple answer.