Quantum Metrics on $M_n(\mathbb{C})$

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A quantum metric is an analog of a metric on a set. More specifically, a quantum metric is a linear operator on the complex vector space of $n \times n$ complex matrices satisfying properties similar to those of a metric. They arise in the study of noncommutative geometry and quantum error correction. We give a definition of quantum metrics which was essentially first given by Kuperberg and Weaver, and provide a simple example of one.

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