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The Principle of Locality made simpler but harder

In physics, the Principle of Locality states that an object is influenced directly only by its immediate surroundings. This could be transformed to a simple mathematical statement of NO wisdom at all. Nevertheless, with extravagant assumption (on the obvious truth) and fascinating explanation (of the ultimate nonsense), the Principle may become a big Law/Theory/Theorem or an incredible Paradox to shake your heart/body.

This is an expository talk of my own adventure in the quantum wonderland (concerning the mathematical problems on direct sums and tensor products – the basic structure in the theory of operator algebras). No working knowledge of quantum information is required in this talk.