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Title: "It's not fuzzy, it's truncated"

In general non-commutative geometries can consist of finite or infinite dimensional algebras. But when exploring infinite dimensional algebras as solutions in physical contexts, we will never be able to ascertain an infinite number of degrees of freedom. This raises the question, how much information is contained in the truncation of an infinite dimensional algebra? And how well do certain well known properties of non-commutative geometries hold under these circumstances?

Together with Abel Stern and Walter von Suijlekom we have numerically explored the Heisenberg relation introduced by Chamseddine, Connes and Mukhanov and created visualisations of the resulting geometries.