Konrad Aguilar* (konrad.aguilar@gmail.com). Quantum metrics on the tensor product of a commutative C*-algebra and an AF C*-algebra.

Given a compact metric space X and a unital AF algebra A equipped with a faithful tracial state, we place quantum metrics on the tensor product of $C(X)$ and A given established quantum metrics on $C(X)$ and A from work with Bice and Latremoliere. We prove the inductive limit of $C(X)$ tensor A given by A is a metric limit in the Gromov-Hausdorff propinquity. We show that our quantum metric is compatible with the tensor product by producing a Leibniz rule on elementary tensors and showing the diameter of our quantum metric on the tensor product is bounded above the diameter of the Cartesian product of the quantum metric spaces. We provide continuous families of $C(X)$ tensor A which extends our previous results with Latremoliere on UHF algebras. (Received September 07, 2019)