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Noncommutative metric geometry is the study of noncommutative generalizations of algebras of Lipschitz functions on metric spaces. Inspired by the work of Connes, Rieffel introduced the notion of a compact quantum metric space and a generalization of the Gromov-Hausdorff distance, thus providing a framework for many approximations of quantum geometries by finite quantum spaces found in the mathematical physics literature and opening a new and fascinating area of inquiry for C*-algebra researchers. However, the question of extending this nascent theory to the more general locally compact setting has been raised many times, in contexts such as the study of spectral triples from C*-dynamical systems to the study of the Moyal planes and other physically relevant models, while an answer remained elusive for some years. In this talk, I propose my suggestion for the foundation of such an extension. I will present a notion of a quantum locally compact metric space, motivated in part by the development of a notion of a generalized quantum Gromov-Hausdorff convergence, provide a few useful characterizations of this new concept, as well as several examples. (Received February 07, 2013)