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Pawel Grzegorzolka* (pgrzegrz@vols.utk.edu), 1403 Circle Drive, Ayres Hall, Knoxville, TN 37916, and **Jeremy Siegert**. *Boundaries of coarse proximity spaces and boundaries of compactifications (PART I)*.

In this talk, we will introduce boundaries of coarse proximity spaces and explore several of their basic properties. After recalling basic definitions related to (small-scale) proximities and reviewing the construction of the Smirnov compactification, we will introduce the large-scale equivalent of (small-scale) proximities, namely coarse proximities. Next, we will define the boundary of a coarse proximity space. We will show that the assignment of a boundary to a coarse proximity space makes up a functor from coarse proximity spaces to compact Hausdorff spaces. We will conclude with a few important properties of boundaries of coarse proximity spaces. In particular, we will explain how coarse proximities capture “closeness at infinity.” This is joint work with Jeremy Siegert. (Received January 13, 2019)