1014-54-1084 Annalisa Crannell, Marc Frantz and Michelle LeMasurier* (mlemasur@hamilton.edu), 198 College Hill Rd., Clinton, NY 13323. Closed Relations and Equivalence Classes of Quasicontinuous Functions.

This paper introduces a notion of equivalence that links closed relations and quasicontinuous functions; we examine classes of quasicontinuous functions that have the same set of continuity points. In doing so, we show that every minimal closed relation is the closure of a quasicontinuous function and vice-versa.

We also show that this notion is of use in dynamical systems. Every quasicontinuous function is equivalent to one that is measurable, and under certain circumstances - in fact, under just those circumstances that appear most often in the dynamics literature - it is equivalent to a quasicontinuous function that has an invariant measure. (Received September 27, 2005)