1046-37-116   **Annalisa Crannell*** (`annalisa.crannell@fandm.edu`), Department of Mathematics, Box 3003, F&M, Lancaster, PA 17604. *Quasicontinuous functions in dynamical systems.*

We present quasicontinuous functions as a "natural" class of functions to bridge the various notions of topological, measure-theoretic, and computational dynamics. This class includes many commonly studied classes of discontinuous maps (piecewise expanding, interval exchange, *etc.*) and we show that these functions have fundamental connections to closed relations. We present results on the properties of iterated quasicontinuous maps and present hypotheses under which the Krylov-Bugolyubov theorem (existence of an invariant measure) holds. (Received July 25, 2008)