1163-03-1162 **Dana Bartosova*** (`dbartosova@ufl.edu`). *Non-metrizable universal minimal flows.*

For a topological group G, a continuous action of G on a compact Hausdorff space is called a *G-flow*. A G-flow is *minimal* if every orbit is dense. The *universal minimal G-flow* has every minimal G-flow as a quotient and it is unique up to an isomorphism of flows. Universal minimal flows of infinite-dimensional groups have received considerable attention in the past 15 years due to their connection with finite combinatorics. On the other hand, locally compact, non-compact groups have non-metrizable universal minimal flows, which means the failure of the finitary combinatorial principles. However, other methods are available for locally compact groups and we encounter interesting connections with set theory in our investigation of discrete groups and their products. This is in part a joint work with Aleksandra Kwiatkowska. (Received September 14, 2020)