1131-37-381 Marco Antonio López* (marco.lopez@unt.edu) and Mariusz Urbański (mariusz.urbanski@unt.edu). Shrinking Targets and Non-Autonomous Systems.

The "shrinking target problem" refers to the study of the set of points in a metric space whose orbit under a dynamical system hit a ball of shrinking radius infnitely often. In our work we focus on establishing Bowen's dimension formula for shrinking target sets in the context of non-autonomous iterated function systems. In special cases, such shrinking target sets arise in Diophantine approximation. (Received July 18, 2017)