

1134-37-271

Marco Antonio López* (marco.lopez@unt.edu), Denton, TX 76201, and **Mariusz Urbański** (mariusz.urbanski@unt.edu), Denton, TX 76201. *Shrinking Targets and Non-Autonomous Systems.*

The shrinking target problem refers to the set of points in a metric space whose orbit under a dynamical system hit a ball of shrinking radius infinitely often. In our work we focus on establishing Bowen's dimension formula for such sets in the context of non-autonomous iterated function systems. In special cases such shrinking targets arise in Diophantine approximation. (Received September 09, 2017)