Abdullah Khan* (noureen.khan@unt.edu), University of North Texas at Dallas, Dallas, Texas 75241. A taste of dual billiards.

We discuss the dynamics of dual (outer) billiard system with finitely many singularities. First, we focus our attention to regular polygons, and study the singularity structure created by the dual billiards’s path around the polygon. And then, we will expand our scope further toward irregular polygons and curvilinear shapes. We use Java programming and C programming to map our figures and analyze our visualization. (Received November 10, 2015)