Joseph H. Silverman*, Mathematics Department, Brown University, Box 1917, Providence, RI 02912. The Pentagram Map on Cubic Surfaces. Preliminary report.

The classical pentagram map is a dynamical system on the space of pentagons, or more generally $n$-gons, in the projective plane $\mathbb{P}^{2}$. We consider an analogous dynamical system on the set of $n$-gons lying on a cubic surface in $\mathbb{P}^{3}$, for which we describe some elementary properties and pose some questions. (Received August 28, 2020)

