1163-37-222Joseph H. Silverman*, Mathematics Department, Brown University, Box 1917, Providence, RI02912. 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)