1161-41-131 Brian Simanek* (brian_simanek@baylor.edu), Baylor Math Department, One Bear Place \#97328, Waco, TX 76798, and Markus Hunziker, Andrei Martinez-Finkelshtein and Taylor Poe. Orthogonal Polynomials and Poncelet Ellipses.
There is an extensive literature relating numerical ranges of special matrices, Blaschke products, and Poncelet curves in the unit disk. We will see how orthogonal polynomials on the unit circle (OPUC) are an ideal tool for understanding how these objects are connected and demonstrate how OPUC provide constructive tools for finding ellipses with special properties. (Received August 14, 2020)

