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Abey López-García* (lopezgarci@southalabama.edu), University of South Alabama, Department of Mathematics and Statistics, ILB 325, 411 University Blvd North, Mobile, AL 36688, and **Guillermo López Lagomasino** and **Erwin Miña-Díaz**. *Nikishin systems on star-like sets and associated multi-orthogonal polynomials.*

Nikishin systems of functions and measures were introduced by E.M. Nikishin in 1980 in a very influential paper in approximation theory. These systems provided for the first time a wide class of functions that possess convergent Hermite-Padé approximants. They also give rise to interesting families of multi-orthogonal polynomials. These polynomials have been investigated with interest on the real line for many years, and in this context many properties are now known. In this talk I will describe algebraic and asymptotic properties of such polynomials in the new context of star-like sets in the complex plane. (Received September 03, 2016)