Faruk F. Abi-Khuzam* (farukakh@aub.edu.lb), Department of Mathematics, American University, Beirut, Lebanon, and Florian J. Bertrand and Giuseppe A. Della Sala. *Star functions in several complex variables.*

Given a function $f$ meromorphic in the plane, its star-function is a subharmonic function defined in the upper half-plane and encoding many of the important functionals associated with $f$, such as the counting functions for the zeros and poles, the Nevanlinna characteristic, and the maximum modulus. It has been used to solve some extremal problems, and to unify several results in the theory. In many instances, the extremal functions in such problems correspond to a harmonic star-function. In this paper we define a star function for a meromorphic function of several complex variables, characterize those $f$ with harmonic star function, and give applications to growth problems. (Received September 09, 2017)