

1125-33-1714 **Jorge Arvesú*** (jarvesu@math.uc3m.es), Department of Mathematics, Avda. de la Universidad 30, 28911 Leganes, Madrid, Spain. *Vector equilibrium problem with constraint and nth root asymptotics for some multiple orthogonal polynomials.*

The nth root asymptotic behavior of some discrete multiple orthogonal polynomials is presented. Two main ingredients of the proposed approach for the study of the aforementioned asymptotic behavior are discussed; namely, an algebraic function formulation for the solution of the equilibrium problem with constraint to describe their zero distribution and the limiting behavior of the coefficients of the recurrence relations for multiple orthogonal polynomials. (Received September 19, 2016)