

# On the Bernstein-Walsh-Siciak Theorem for multifunctions

Maciej P. Denkowski (Jagiellonian University)

(joint work with Anna Denkowska, Cracow University of Economics)

## Abstract

As a first step towards a general set-theoretic counterpart of the remarkable Bernstein-Walsh-Siciak Theorem concerning the rapidity of polynomial approximation of a holomorphic function on polynomially convex compact sets in  $\mathbb{C}^n$ , we present a version of this theorem for analytic hypersurfaces seen as analytic multifunctions. We discuss also the possible generalisation to the case of set-theoretic complete intersections.