Boundary value problems for nonlinear difference equations: a survey

Jean Mawhin

Université Catholique de Louvain
Institut de Recherche en Mathématique et Physique
chemin du Cyclotron, 2
1348 Louvain-la-Neuve, Belgium
jean.mawhin@uclouvain.be

We survey the use of topological and of variational methods in the study of various types of boundary value problems, including periodic ones, for nonlinear difference equations and systems.

Both the existence and the multiplicity of solutions will be addressed.