

## ON THE EXISTENCE OF SOLUTIONS TO BOUNDARY VALUE PROBLEMS ON INFINITE INTERVALS FOR NONLINEAR DISCRETE SYSTEMS

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*Abstract.* We provide criteria for the existence of solutions of nonlinear discrete-time boundary value problems on infinite-time intervals. The problems are formulated as nonlinear operator equations on sequence spaces and the tools of nonlinear functional analysis are employed throughout the paper.

*Mathematics subject classification (2020):* 34A34, 34B15, 47H09, 47H10, 47J07.

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