

Hammerstein integrodifference equations - structural properties and their applications

Magdalena Nockowska-Rosiak*

* Institute of Mathematics, Lodz University of Technology, Łódź, Poland
E-mail: magdalena.nockowska@p.lodz.pl

We consider structural properties such as monotonicity or subhomogeneity of Hammerstein vector-valued integral operators over compact domains involved in nonautonomous integrodifference equations. We show consequence of these properties on the dynamics of Hammerstein integrodifference equations in a local-global stability principle.

The talk is based on joint work with Christian Pötzsche from University of Klagenfurt, Austria, [1].

REFERENCES

- [1] M. Nockowska-Rosiak, C. Pötzsche, Monotonicity and discretization of Hammerstein integrodifference equations, *J. Comp. Dynamics*, **9(1)**(2023), doi: 10.3934/jcd.2022023.