Positive solutions to first order differential systems with nonlocal conditions

Diana-Raluca Herlea

Faculty of Mathematics and Computer Science, Babeş-Bolyai University Cluj-Napoca

dherlea@math.ubbcluj.ro

In the present paper we study the existence and the localization of positive solutions to nonlocal boundary value problems for first order differential systems. The localization is established by the vector version of Krasnosel'skiĭ's fixed point theorem in cones.

References

[1] Li, Y., Sun, L., *Infinite many positive solutions for nonlinear first-order BVPS with integral boundary conditions on time scales*, Topol. Methods Nonlinear Anal., **41**(2013), 305-321.

[2] Precup, R., *A vector version of Krasnosel'skiĭ's fixed point theorem in cones and positive periodic solutions on nonlinear systems*, J. Fixed Point Theory Appl., **2**(2007), 141-151.

[3] Precup, R., *Moser-Harnack inequality, Krasnosel'skiĭ type fixed point theorems in cones and elliptic problems*, Topol. Methods Nonlinear Anal., **40**(2012), 301-313.