*Fixed Point Theory*, 15(2014), No. 1, 189-198 http://www.math.ubbcluj.ro/~nodeacj/sfptcj.html

## ON THE EXISTENCE OF CONNECTED SETS OF SOLUTIONS FOR NONLINEAR OPERATORS

## DONAL O'REGAN

Dedicated to James N. (Jim) Flavin with admiration

School of Mathematics, Statistics and Applied Mathematics National University of Ireland, Galway, Ireland E-mail: donal.oregan@nuigalway.ie

Abstract. In this paper we discuss continua of fixed points and coincidence points.Key Words and Phrases: Continua of fixed points, continua of coincidence points.2010 Mathematics Subject Classification: 47H10, 47H04.

## References

- [1] A. Granas, Sur la méthode de continuité de Poincare, C.R. Acad. Sci. Paris, 282(1976), 983-985.
- [2] M. Furi, M.P. Pera, On the existence of an unbounded connected set of solutions for nonlinear equations in Banach spaces, Atti. Accad. Naz. Lincei Rend. Cl. Sci. Fis. Mat. Natur., 67(1-2)(1979), 31-38.
- [3] M. Martelli, Continuation principles and boundary value problems, in Topological Methods for Ordinary Differential equations, Lecture Notes in Math, Vol. 1537, Springer, Berlin, 1993, 32–73.
- [4] J. Mawhin, Continuation theorems and periodic solutions of ordinary differential equations, in Topological Methods in Differential Equations and Inclusions, NATO ASI Series C, Vol. 472, Kluwer Academic Publishers, Dordrecht, 1995, 291–375.
- [5] D. O'Regan, Coincidence theory for multimaps, Applied Mathematics and Computation, 219(2012), 2026–2034.
- [6] D. O'Regan, J. Peran, Fixed points for better admissible multifunctions on proximity spaces, J. Math. Anal. Appl., 380(2011), 882–887.
- [7] D. O'Regan, R. Precup, Theorems of Leray-Schauder type and Applications, Taylor and Francis Publishers, London, 2002.
- [8] S. Park, Fixed point theorems for better admissible multimaps on almost convex spaces, J. Math. Anal. Appl., 329(2007), 690–702.

Received: August 31, 2012; Accepted: November 2, 2012.

189