



**EXISTENCE OF SOLUTIONS FOR VOLTERRA INTEGRAL
EQUATIONS DEPENDING ON DERIVATIVE**

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Abstract

In this paper, we study the existence of continuous solutions of an integral equation with implicit derivative. The theory of integral equations has many useful applications in mathematical physics, economics, biology, as well as in describing real world problems. The main tool used in our investigations is a fixed point theorem for upper semicontinuous mappings with acyclic values.

Keywords and phrases: AR (absolute retract), cohomology, acyclic sets, integral equations.

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