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EXISTENCE AND ASYMPTOTIC STABILITY OF SOLUTIONS  
TO DIFFERENTIAL EQUATIONS WITH DISTRIBUTED DELAY:  
A TOPOLOGICAL APPROACH

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We discuss the existence and asymptotic stability of solutions to a differential problem arising from population dynamics models, where the evolution of the process is conditioned by the effects of a distributed delay. In our study we consider two different kinds of distributed delay which lead respectively to a functional differential equation or to an integro-differential equation.

We show how, by combining iterative methods and fixed point theorems for condensing maps, the existence and asymptotic stability of the solutions can be obtained.

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