



# On Nonlinear Abstract Neutral Differential Equations with Deviated Argument

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**Abstract:** In this paper we are concerned with a neutral differential equation with a deviated argument in an arbitrary Banach space  $X$ . To study the existence and uniqueness of a solution of the problem considered, we use the theory of the analytic semigroups and the fixed point arguments. Finally, we give an example to demonstrate an application of the abstract results.

**Keywords:** *neutral differential equation with a deviated argument; Banach fixed point theorem; analytic semigroup.*

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