Neutral Functional Equations with Causal Operators on a Semi-Axis

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Abstract: This paper is concerned with the global study of a certain class of functional differential equation involving causal (abstract Volterra) operators on a certain function space $E(R_+, R^n)$. It is closely related to our previous joint papers, listed in the References, the difference being motivated by the fact that we consider new function spaces on the half-axis R_+. The approach in this paper is also somewhat different than in preceding papers, by C. Corduneanu, the results being also different. A dynamical interpretation is also indicated.

Keywords: *Neutral functional equations; causal operators; global existence.*

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