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Title: Stability results for measure neutral functional differential equations via generalized ODEs

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Abstract: This is a joint work with Márcia Federson. We consider a class of measure neutral functional differential equations whose integral form is given by

$$x(t) - x(0) = \int_0^t f(x_s, s)dg(s) + \int_{-r}^0 d_\theta[\mu(t, \theta)]x(t + \theta) - \int_{-r}^0 d_\theta[\mu(0, \theta)]\varphi(\theta)$$

and we establish stability results using the correspondence between solutions of this equation and solutions of a generalized ordinary differential equations. We introduce the concept of regular stability of linear operators on a Banach space of \mathbb{R}^n -valued regulated functions. We discuss the total stability for a class of measure neutral functional differential equations.