Eduard Toon, Universidade Federal de Juiz de Fora, Brazil.   email: `MISSING`

LYAPUNOV THEOREMS FOR MEASURE FDES VIA KURZWEIL-EQUATIONS

This is a joint work with Márcia Federson and Jaqueline G. Mesquita. We consider measure functional differential equations (we write measure FDEs) of the form $Dx = f(x_t, t)Dg$, where f is Perron-Stieltjes integrable, x_t is given by $x_t(\theta) = x(t+\theta), \theta \in [-r, 0]$, with $r > 0$, and Dx and Dg are the distributional derivatives in the sense of the distribution of L. Schwartz, with respect to functions $x : [t_0, \infty) \to \mathbb{R}^n$ and $g : [t_0, \infty) \to \mathbb{R}$, $t_0 \in \mathbb{R}$. We establish a Lyapunov-type theorem for measure FDEs via theory of generalized ordinary differential equations (also known as Kurzweil equations).