

Stanislav Žabić (zabic@math.lsu.edu), Department of Mathematics, Louisiana State University, 327 Lockett Hall, Baton Rouge, Louisiana 70803-4918, USA, *Sampling Methods for Impulse Systems*

This talk will introduce a sampling technique for impulsive systems analogous to the Euler's method. The limits of the sampled approximations are shown to converge to the generalized solutions that was introduced by A. Bressan and F. Rampazzo. Moreover, we will see that the sampling technique generates the same type of solution as the one generated by systems with approximate controls. Further applications of the sampling technique are proposed at the end of the talk. All the results are a part of the presenter's thesis work done under the supervision of Peter R. Wolenski.