1164-37-125 **J.D. Mireles James***, Florida Atlantic University, 777 Glades Road P.O. Box 3091, Department of Mathematical Sciences, Boca Raton, FL 33431. *Parameterization methods for unstable manifolds of delay differential equations.*

That parameterization method is a functional analytic framework for studying invariant manifolds, which begins by formulating an a conjugacy equation for the manifold. Numerically solving the conjugacy equation leads to efficient numerical schemes for computing parameterizations of the manifold, and implicit function theory can be used to obtain a-posteriori error bounds. I will discuss parameterization methods for studying unstable manifolds attached to equilibrium and periodic solutions of delay differential equations, and provide some numerical examples. This is joint work with J.P. Lessard, Olivier Henot, and Chris Groothedde. (Received January 15, 2021)