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Archana N Timsina* (aneupanetims2016@fau.edu), Florida Atlantic University, 777 Glades road, Department of Mathematical Sciences, Boca Raton, FL 33431, and **Jason D Mireles James** (jmirelesjames@fau.edu), Department of Mathematical Sciences, Florida Atlantic University, Science Building, Room 262, Boca Raton, FL 33431. *Parameterized stable/unstable manifolds for periodic solutions of implicitly defined dynamical systems.*

We develop a parameterization method for stable/unstable manifolds attached to periodic orbits of systems whose dynamics is determined by an implicit rule. We do not require that the past or future of the system is globally unique. We represent the local invariant manifold using high order polynomials and show that the method leads to efficient numerical calculations. We implement the method for several example systems in dimension two and three. (Received January 13, 2021)