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**Patrick Guidotti\*** (gpatrick@math.uci.edu), 340 Rowland Hall, Department of Mathematics, Irvine, CA 92697. *Well-posedness and Stability of Equilibria for a Droplet Equation.*

In this talk the classical well-posedness of a simple droplet model will be analyzed. Its equilibria will be characterized and their stability established. The model consists of a moving boundary value problem which will be reduced to a nonlocal geometric evolution (for the domain alone). Well-posedness is obtained by analyzing the properties of the relevant linearization, whereas stability follows from an explicit characterization of the linearization and from the introduction of a convenient coordinate system for the geometric evolution. (Received August 25, 2015)