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Laura Starkston* (lstarkst@stanford.edu). *Planar curves symplectified!*

Algebraic curves in the complex projective plane can be explicitly understood as the zero set of a degree d homogeneous polynomial. They can develop singularities like nodes and cuspidal points, and the moduli space of curves with a particular set of singularities can become very complicated. Complex curves are particular examples of symplectic submanifolds of CP^2 , and we can ask similar questions about the space of all symplectic submanifolds of a particular degree with particular singularities. These questions can be much harder since symplectic submanifolds make up an infinite dimensional space. I will discuss initial explorations of symplectic submanifolds of CP^2 (with prescribed singularities). I will describe some of my results that give similarities between the symplectic and complex categories, and also some giving differences (parts are joint with Golla). (Received September 16, 2017)