1037-58-188 **Junho Lee*** (junlee@mail.ucf.edu), Department of Mathematics, University of Central Florida, Orlando, FL 32816, and **Thomas H Parker** (parker@math.msu.edu), Department of Mathematics, Michigan State University, East Lansing, MI 48823. *A Structure Theorem for the Gromov-Witten Invariants of Kähler Surfaces.*

We prove a structure theorem for the Gromov-Witten invariants of compact Kähler surfaces X with geometric genus $p_g > 0$. We first define a new type of symplectic "Local Gromov-Witten invariant" associated to a smooth complex curve with spin structure. When X has a smooth canonical divisor D, the structure theorem expresses the GW invariants in terms of the local invariants associated with the components of D, which in turn are universal functions determined by the genera the canonical divisor components and the holomorphic Euler characteristic of X. We compute these universal functions in special cases. (Received February 01, 2008)