1085-11-214 **Michael John Griffin***, Dept. of Mathematics and Computer Sci., W401, Emory University, Atlanta, GA 30322, and **Andreas Malmendier** and **Ken Ono**. *SU(2)-Donaldson invariants of the complex projective plane.*

There are two families of Donaldson invariants for the complex projective plane, corresponding to the SU(2)-gauge theory and the SO(3)-gauge theory with non-trivial Stiefel-Whitney class. In 1997 Moore and Witten conjectured that the regularized u-plane integral on $\mathbb{C}\mathrm{P}^2$ gives the generating functions for these Donaldson invariants. In earlier work, the second two authors proved the conjecture for the SO(3)-gauge theory. Here we complete the proof of the conjecture by confirming the claim for the SU(2)-gauge theory. (Received September 10, 2012)