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Alexander Voronov, Eric Harrelson and J Javier Zuniga* (zuniga@math.umn.edu), 127
Vincent Hall, 206 Church St. S.E., Minneapolis, MN 55455. *Quantum Master Equation of
Open-Closed String Theory*. Preliminary report.

We set up a Quantum Master Equation for open-closed string theory and show that the corresponding moduli spaces give rise to a solution, a generating function for their fundamental chains. The equation encodes the topological structure of the compactification of the moduli space of bordered Riemann surfaces. We also discuss the structure of a Quantum Master Equation for the Gromov-Witten potential, i.e., the generating function of the moduli space of maps of Riemann surfaces to a target space. (Received May 30, 2006)