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D. Arcara* (arcara@math.utah.edu), Department of Mathematics, University of Utah, 155 S. 1400 E. Room 233, Salt Lake City, UT 84121, and **F. Sato**. *A relation in the tautological ring of $\overline{\mathcal{M}}_{g,1}$* . Preliminary report.

Mumford proved that $\lambda_g + \lambda_{g-1}\psi + \cdots + \psi^g$ is 0 in the Chow ring of $\mathcal{M}_{g,1}$. We find an explicit formula for $\lambda_g + \lambda_{g-1}\psi + \cdots + \psi^g$ in the tautological ring of $\overline{\mathcal{M}}_{g,1}$ as a combination of similar classes supported on boundary strata. (Received August 23, 2005)