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**Alex Bene\*** (bene@usc.edu). *Intersections of Combinatorial Cycles in the Moduli Space of Curves.*

The use of combinatorics has been ubiquitous in the study of the tautological ring of the moduli space of stable curves. In one perspective, the moduli space of smooth curves has a description as a moduli space of metric fatgraphs, and certain classes of the tautological ring have nice combinatorial descriptions in terms of these graphs. In this talk, I will discuss a computation which derives a relation between tautological classes by analyzing and enumerating chain-level intersections of some of these combinatorial classes. If time permits, I will also comment on an alternate approach to the same problem by Bertin and Romagny using Hurwitz spaces and discuss its implications for the fatgraph approach. (Received February 11, 2009)