Holomorphic differentials and Witten's r-spin class

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Given nonnegative integers a_1, ... , a_n with sum 2g-2, let H_g(a_1, ... , a_n) be the locus in M_{g,n} of n-pointed genus g curves [C, x_1, ... , x_n] such that the divisor a_1 x_1 + ... + a_n x_n is canonical. I will discuss a conjecture expressing the class of the closure of this locus as an r = 0 limit of Witten's r-spin class.
This is joint work with Felix Janda, Rahul Pandharipande, and Dimitri Zvonkine.