1067-17-1801   **Bojko Bakalov*** (`bojko_bakalov@ncsu.edu`) and **Todor Milanov**. *W-constraints for simple singularities.*

Gromov-Witten invariants are naturally organized in a generating function, which is a formal power series in infinitely many variables. In many cases this function is a highest-weight vector for the Virasoro algebra and at the same time is a solution of an integrable hierarchy of partial differential equations. Similar generating functions can be introduced for the Frobenius structures coming from singularities of hypersurfaces. The generating function of a simple singularity was shown recently to be a solution of the Kac-Wakimoto hierarchy. Our main result is that it is also a highest weight vector for the corresponding W-algebra. (Received September 21, 2010)