1019-81-142   **Vassily Gorbounov*** (`vgorb@ms.uky.edu`), Department of Mathematics, 719 Patterson Office
Tower, University of Kentucky, Lexington, KY 40506. *Gerstenhaber Structures and Vertex
Algebras.*

In this talk we provide a simple construction of a homotopy Gerstenhaber structure on the Chiral de Rham complex
which reduces to the Gerstenhaber algebra structure on the BRST homology, introduced by Lian and Zuckerman. Our
method shows that in the case of a general vertex algebra there is a potential obstruction to the existence of the above
homotopy structure. (Received August 13, 2006)