1122-51-372 **Bailin Song*** (bailinso@ustc.edu.cn). *The global sections of the chiral de Rham complex on a K3 surface.*

The chiral de Rham complex is a sheaf of vertex algebras on any nonsingular algebraic variety or complex manifold M, which contains the ordinary de Rham complex as the weight zero subspace. We show that when M is a K3 surface, the algebra of global sections is isomorphic to an $N = 4$ superconformal vertex algebra with central charge 6. (Received August 16, 2016)