1012-14-181Takashi Kimura\* (kimura@math.bu.edu), Dept. of Math. and Statistics, 111 Cummington St.,<br/>Boston, MA 02215. Stringy algebraic structures on orbifolds.

Orbifold cohomology, introduced by Chen-Ruan, is a kind of cohomology theory associated to a complex orbifold which refines ordinary cohomology. It is defined as the piece of orbifold Gromov-Witten theory associated to the moduli space of degree zero stable maps from orbicurves into the orbifold. We discuss some interesting variants of this structure. (Received September 19, 2005)