

1031-53-133

Takashi Kimura* (kimura@math.bu.edu), Dept. of Mathematics and Statistics, 111
Cummington St., Boston, MA 02215. *The Stringy Algebraic Structures on Orbifolds and
Topological Field Theory.*

Associated to an almost complex manifold with the action of a finite group G is its stringy cohomology, the G -invariants of which yield the Chen-Ruan orbifold cohomology of the associated orbifold. An analogous construction can also be done in K -theory. We explain their interpretation as an equivariant topological field theory and discuss some possible generalizations. (Received August 07, 2007)