Meeting: 1001, Evanston, Illinois, SS 13A, Special Session on Algebraic Topology: Interactions with Representation Theory and Algebraic Geometry

1001-55-351
T. Fiore, Department of Mathematics, University of Michigan, 2074 East Hall, Ann Arbor, MI 48109-1109, and I. Kriz* (ikriz@umich.edu), Department of Mathematics, University of Michigan, 2074 East Hall, Ann Arbor, MI 48109-1109. On Jacobians of complex curves with boundary.

We will discuss a moduli space S which contains homological data of complex curves with parametrized boundary (Segal's 'rigged surfaces') and has the gluing properties of stack of lax commutative monoids with cancellation. This means that conformal field theory in the sense of Segal can be defined on S. We will show that examples of such conformal field theories include lattice theories (in particular level 1 WZW). (Received August 31, 2004)