

Meeting: 1003, Atlanta, Georgia, SS 10A, AMS Special Session on Dynamics of Mapping Class Groups on Moduli Spaces, I

1003-57-909 **Charles Frohman*** (frohman@math.uiowa.edu), Department of Mathematics, The University of Iowa, Iowa City, IA 52242, and **Kathy Zhong** (kzhong@csus.edu), The Department of Mathematics, Sacramento State University, Sacramento, CA, 95819. *Integrating on the $SU(3)$ -character variety of a surface group.*

We will give an explicit state sum formula for integrating a function over the $SU(3)$ -character variety of a surface group against the natural symplectic measure on the character variety. We use this formula to investigate the action of the mapping class group on the character variety. (Received September 30, 2004)