Andrew Michael Sanders* (sanderandy@gmail.com). Riemannian metrics on character varieties of closed surface groups.

We will present a general method for constructing Riemannian metrics on the $G$-character variety of a closed, orientable surface group where $G$ is a semisimple Lie group. The Riemannian metrics we construct are compatible with the Atiyah-Bott-Goldman symplectic structure and generalize the construction of the Weil-Petersson metric on Teichmüller space and the Hitchin $L^2$-metrics on the moduli space of $G$-Higgs bundles. (Received September 06, 2016)