1125-53-558   **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 Teichmuller space and the Hitchin L^2-metrics on the moduli space of G-Higgs bundles. (Received September 06, 2016)