1086-14-1090   **Sean Dodd Lawton*** (`lawtonsd@utpa.edu`), Department of Mathematics, 1201 W. University Drive, Edinburg, TX 78539, and **Carlos Florentino**. *Topology of Character Varieties of Abelian Groups.* Preliminary report.

Let K be a compact Lie group, G be its complexication, and F be any finitely generated Abelian group. We prove that the conjugation orbit space Hom(F,K)/K is a strong deformation retract of the GIT conjugation orbit space Hom(F,G)/G. As a corollary, we determine necessary and sufficient conditions for Hom(F,G)/G to be irreducible when G is connected and semisimple, and F is free Abelian. This is joint work with C. Florentino. (Received September 26, 2012)