1161-51-89 Max Riestenberg* (riestenberg@math.utexas.edu). Explicit perturbation neighborhoods for Anosov representations.

It has been known since their definition due to Labourie that Anosov representations are stable- any sufficiently small perturbation of an Anosov representation is still Anosov. In 2014, Kapovich, Leeb and Porti characterized Anosov representations as "Morse actions" on the associated symmetric space and generalized the Morse lemma from hyperbolic geometry to higher rank symmetric spaces. Supplementing their proof with explicit estimates in the symmetric space allows us to describe explicit neighborhoods of Anosov representations. (Received August 11, 2020)