1155-57-155 **Aaron Calderon** and **James Farre*** (james.farre@yale.edu). *Shear-Shape Coordinates for Teichmüller Space and Applications.* Preliminary report.

We introduce a family of coordinate systems for the Teichmüller space of a closed surface adapted to an arbitrary (non-maximal) geodesic lamination, generalizing the shearing coordinates of Bonahon and Thurston. When the lamination carries a transverse measure μ of full support, the coordinates also parameterize quadratic differentials whose vertical foliation is measure equivalent to μ. Following a strategy of Mirzakhani, we then exhibit dynamically natural mappings between strata of quadratic differentials and earthquake invariant subsets of the bundle of measured laminations over Teichmüller space. (Received January 09, 2020)