1161-51-30   **Charles Ouyang** and **Andrea Tamburelli*** (`at52@rice.edu`), TX. *Length spectrum compactification of the* $SL(3, \mathbb{R})$*-Hitchin component.*

Higher Teichmüller theory studies geometric and dynamical properties of surface groups representations into higher rank Lie groups. One of these higher Teichmüller spaces is the $SL(3, \mathbb{R})$-Hitchin component, a connected component in the $SL(3, \mathbb{R})$-character variety that entirely consists of faithful and discrete representations that are the holonomies of convex real projective structures on a surface. In a joint work with Charles Ouyang, inspired by Bonahon's interpretation of Thurston's compactification of Teichmüller space by means of geodesic currents, we describe the length spectrum compactification of the $SL(3, \mathbb{R})$-Hitchin component. We interpret the boundary points as hybrid geometric structures on a surface that are in part flat and in part laminar. (Received July 27, 2020)