1129-37-196 **John Franks** and **Michael Handel*** (`michael.handel@lehman.cuny.edu`), Department of Mathematics, Lehman College, Bronx, NY 10468. *Entropy zero area preserving diffeomorphisms of surfaces.* Preliminary report.

We continue our study of entropy zero, area preserving diffeomorphisms $F : S \to S$ of a compact surface S with negative Euler characteristic. Our previous work presented a 'structure theorem' in the genus zero case. We have now extended this to arbitrary genus. As an important special case, suppose that the set of periodic points equals the set of fixed points. In this case we prove that there is a finite set of open, disjoint, F-invariant, finite type subsurfaces S_i, whose union is dense, and a finite set of oriented minimal geodesic laminations Λ_i, such that the F-orbit of each birecurrent point in S_i 'tracks' a leaf of Λ_i. (Received March 15, 2017)