1151-57-285 Alexander Stas* (astas@gc.cuny.edu). Translation distance bounds for fibered 3-manifolds with boundary.

Given M_{φ} a fibered hyperbolic 3-manifold with boundary, we show that the translation distance of the monodromy φ can be bounded above by the complexity of an essential surface with non-zero slope. Furthermore we prove that the minimal complexity of a surface with non-zero slope in M_{φ^n} tends to infinity as $n \to \infty$. Additionally we show that an infinite family of fibered hyperbolic knots has translation distance bounded above by two, satisfying a conjecture by Schleimer which postulates that this behavior should hold for all fibered knots. (Received August 20, 2019)