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**Benjamin Steinberg\*** (bsteinberg@ccny.cuny.edu) and **Mike Boyle**, Department of Mathematics, University of Maryland, College Park, MD 20742-4015. *The decidability of flow equivalence for shifts of finite type and stable isomorphism for Cuntz-Krieger  $C^*$ -algebras.*

One of the oldest open questions in symbolic dynamics is to decide whether two shifts of finite type are conjugate. Flow equivalence, an important coarsening of conjugacy, has also been highly studied. We show, based on work of Boyle and Huang, that flow equivalence is decidable for shifts of finite type. We also provide a decision procedure for the closely related problem of whether the Cuntz-Krieger algebras associated to shifts of finite type are stably isomorphic.

The decision procedures are based on deep decidability results in geometric group theory. (Received September 08, 2014)