1145-03-1394 **Karen M. Lange*** (karen.lange@wellesley.edu), Wellesley College, 106 Central St., Wellesley, MA 02481. *Classifications of definable subsets of equivalence and injection structures.*

For a fixed syntactic-complexity class $\mathcal{C}$, a subset of a structure is *$\mathcal{C}$-definable* if the subset is defined by some $\mathcal{C}$-formula. Generalizing an idea of Friedberg, Goncharov and Kogabaev introduced the notion of a *$\mathcal{C}$-classification* of a structure; this is a computable list of $\mathcal{C}$-formulas such that every $\mathcal{C}$-definable subset of the structure is defined by a unique formula in the list. We study the connections among Σ^0_1-, $d-\Sigma^0_1$-, and Σ^0_2-classifications in the context of two families of structures: unbounded computable equivalence structures and unbounded computable injection structures. This is joint work with Simona Boyadzhiyska, Abigail Raz, Rebecca Scanlon, John Wallbaum, and Xueyin Zhang. (Received September 21, 2018)