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Dynamics of splittings of free-by-cyclic groups.

Associated to a splitting of a group G as a (finitely generated) free-by-cyclic group is a monodromy automorphism, which we view as a dynamical system on the free subgroup. In joint work with Dowdall and Kapovich, we show that on certain components of the BNS-invariant for G , all such associated dynamical systems are related in a beautiful and essential way. This comes from a geometric model for G , and a single dynamical system which encodes all of the dynamics associated to splittings coming from the given component of the BNS-invariant. In this talk I will first describe the relevant background, terminology, and motivation, then I will explain our constructions and results. (Received January 17, 2015)