

1151-20-141 **Dmytro Savchuk*** (savchuk@usf.edu), 4202 E Fowler ave, CMC 342, Tampa, FL 33620, and
Ievgen Bondarenko. *The duality of the affine actions on trees.*

Every semigroup action on a tree given by a (finite) automaton has an associated dual action given by the dual automaton. In this talk I will consider the affine groups of subrings of a global function field, construct their actions on a regular tree, and describe the dual actions. In particular, this gives a characterization of reversible and bireversible actions, and produces a natural family of bireversible automata. The talk is based on a joint work with Ievgen Bondarenko. (Received August 15, 2019)