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**Trevor Arrigoni, Alexander Black, Jessica Harter, David Milan and Yansy Perez\***  
(yperez@uttyler.edu). *On Inverse Semigroups of Self-Similar Graph Actions.*

We discuss a recently discovered class of inverse semigroups called the inverse semigroups of self-similar graph actions. To describe this class, we characterized the idempotents, ideals, Green's Relations, and other properties common to inverse semigroups in general. Furthermore, we provide conditions that ensure a self-similar graph action is fundamental or 0-disjunctive and, more generally, when it satisfies properties of inverse semigroups relevant to the study of  $C^*$ -algebras. (Received September 17, 2019)