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**Tyler A. Brown\*** (tab5357@iastate.edu), Department of Mathematics, Iowa State University, Ames, IA 50011-2104, and **Timothy H. McNicholl** (mcnichol@iastate.edu). *On the Degrees of Categoricity of Semi-Atomic  $L^p$  Spaces.*

In 2015, T. McNicholl proved that the purely atomic  $L^p$  spaces with finitely many atoms are computably categorical when  $p \geq 1$  is computable and that the degree of categoricity of purely atomic  $L^p$  spaces with infinitely many atoms is  $\mathbf{0}'$  whenever  $p \geq 1$ ,  $p \neq 2$  is a computable real. Thereafter, it was shown by Clanin, McNicholl, and Stull that the purely non-atomic  $L^p$  spaces are computably categorical when  $p \geq 1$  is a computable real. In this talk we will investigate the semi-atomic  $L^p$  spaces. For computable  $p \geq 1$ ,  $p \neq 2$  we then illustrate how the interplay between atomic and non-atomic parts of these spaces increases the degree of categoricity by one jump when a semi-atomic  $L^p$  space has finitely and infinitely many atoms. (Received September 21, 2018)