1064-03-183 **Rachel Epstein*** (repstein@math.harvard.edu), Department of Mathematics, FAS Harvard University, 1 Oxford St, Cambridge, MA 02138. *Definability and Automorphisms of the C.E. Sets.*

The computably enumerable (c.e.) sets form a lattice under set inclusion. Determining which classes of sets and degrees are definable in the lattice has been an important topic of study. Automorphisms can help us to determine which classes are not definable. We will discuss the history of definability and automorphism problems, as well as recent results and open questions. The focus of the talk will be on the recently-solved problem of determining which jump classes of degrees are definable. All upward-closed jump classes are definable except for the nonlow degrees. (Received September 08, 2010)