Johanna N. Y. Franklin* (johanna.franklin@uconn.edu), Department of Mathematics, 196 Auditorium Road, University of Connecticut, Unit 3009, Storrs, CT 06269-3009, and Reed Solomon (david.solomon@uconn.edu), Department of Mathematics, 196 Auditorium Road, University of Connecticut, Unit 3009, Storrs, CT 06269-3009. Lowness for isomorphism.

We bring the concept of lowness into computable structure theory and say that a Turing degree is low for isomorphism if, whenever it can compute an isomorphism between a pair of computable structures, there is actually a computable isomorphism between them. Several natural classes of Turing degrees, such as 2-generics, contain only degrees which are low for isomorphism. We present results illustrating how the class of low for isomorphism degrees relates to several classes of degrees that commonly appear in studies of lowness and discuss lowness for isomorphism in the context of particular types of structures. (Received September 25, 2012)