IPM Combinatorics II: Design Theory, Graph Theory, and Computational Methods April 22-27, 2006, IPM, Tehran

Thoughts on the Isomorphism Problem

B. D. McKay Australian National University Canberra, Australia

We survey the problem of detecting isomorphism between two combinatorial structures, such as graphs, matrices, designs and codes. Related to these are the problems of computing automorphism groups and canonical forms. Emphasis will be on the practical aspects of the problem rather than on the theoretical niceties.