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Sommario/riassunto

This volume presents the written versions of the tutorial lectures given at the Workshop on Computational Prospects of Infinity, held from 18 June to 15 August 2005 at the Institute for Mathematical Sciences, National University of Singapore. It consists of articles by four of the leading experts in recursion theory (computability theory) and set theory. The survey paper of Rod Downey provides a comprehensive introduction to algorithmic randomness, one of the most active areas of current research in recursion theory. Theodore A. Slaman's article is the first printed account of the ground-breaking