

PREFACE

The Workshop on *Computational Prospects of Infinity* was held at the Institute for Mathematical Sciences, National University of Singapore, from 20 June to 15 August 2005.

The focus in the first month of the Workshop was on set theory, with two tutorials running in parallel, by John Steel (“Derived models associated to mice”) and W. Hugh Woodin (“Suitable extender sequences”). There were also 21 talks given during this period. The second half of the Workshop was devoted to recursion theory, with two tutorials given, respectively, by Rod Downey (“Five lectures on algorithmic randomness”) and Ted Slaman (“Definability of the Turing jump”). In addition, there were 42 talks delivered over four weeks.

This volume constitutes Part I of the *proceedings* of the Workshop. It contains written versions of the tutorials given during the set theory and recursion theory sections of the Workshop. Part II of the *proceedings* appears as a separate volume, and comprises refereed articles, both contributed and invited, based on talks given at the Workshop.

During the Workshop, forums on the future of set theory and recursion theory were also organized. Participants discussed technical as well as philosophical and foundational issues related to problems and directions of research in these two fields. The Continuum Hypothesis was very much of central interest in the set theory forum, while in recursion theory the topics covered were more varied and diverse.

The Workshop provided a platform for researchers in the logic community from many parts of the world to meet in Singapore, to discuss mathematics and to experience a city that is a meeting point of East and West. We thank the Department of Mathematics and the Institute for Mathematical

Sciences at the National University of Singapore for their support and hospitality extended to all participants.

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