LOGIC, COMPUTABILITY, AND RANDOMNESS

CO-SPONSORED BY THE ASSOCIATION FOR SYMBOLIC LOGIC

Córdoba, Argentina September 20–24, 2004

The conference "Logic, Computability, and Randomness" was held at the Facultad de Matemática, Astronomía y Física, Universidad Nacional de Córdoba, Córdoba, Argentina on September 20–24, 2004. The Program Committee consisted of Verónica Becher (University of Buenos Aires), Rod Downey (Victoria University, New Zealand), and Denis Hirschfeldt (University of Chicago). The workshop was organized by Verónica Becher and Santiago Figueira of University of Buenos Aires. Financial support was provided by Universidad de Buenos Aires, International Science and Technology (ISAT) Linkages Fund, New Zealand, and Agencia Nacional de Promoción Científica y Tecnológica, Argentina. The conference was held in parallel with the Thirty-third Argentinean Conference on Computer Science and Operational Research (33 JAIIO), organized by Sociedad Argentina de Informática e Investigación Operativa (SADIO).

The conference was mainly devoted to the currently very active area of computability and randomness, with a number of fine lectures by leading experts. The quality of these lectures and the interaction made possible through the workshop model used for the meeting together made for a highly successful conference. Slides from the lectures are available on the conference website http://www.dc.uba.ar/people/logic2004/.

There were 8 invited talks:

Joos Heintz (University of Buenos Aires/University of Cantabria), *The queries of algebraic geometry*.

Antonín Kučera (Charles University, Prague), Remarks on randomness and PA sets.

 $\label{thm:condition} \mbox{Joseph Miller (Victoria University of Wellington/Indiana University)}, \mbox{\it Omega operators}.$

André Nies (University of Auckland), Randomness and descriptive set theory.

Jan Reimann (University of Heidelberg), Random functions.

Theodore Slaman (University of California, Berkeley), Measures and their random reals. Diego Vaggione (University of Córdoba), Axiomatizability by sentences of the form $\forall \exists ! \land p = q$.

Paul Vitányi (CWI, Amsterdam), Extracting meaning: positive randomness and negative randomness.

For the Organizing Committee Verónica Becher, Chair