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10TH ASIAN LOGIC CONFERENCE

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Kobe, Japan
September 1–6, 2008

The 10th Asian Logic Conference was held September 1–6, 2008 in Kobe University, Japan. Major funding was provided by the Association for Symbolic Logic, the Japan Society for the Promotion of Science, the Inoue Foundation for Science, and Kobe University. The Program Committee consisted of Toshiyasu Arai(Chair), Jörg Brendle, Chi Tat Chong, Rod Downey, Qi Feng, Hirotaka Kikyo, and Hiroakira Ono. The members of the Local Organizing Committee were Mutsunori Banbara, Makoto Kikuchi(Chair), Hiroaki Minami, Ichiro Nagasaka, and Akira Suzuki.

The program included three four-hour tutorials, given by Peter Cholak, Greg Hjorth, and Byunghan Kim, and four one-hour plenary talks given by Jeremy Avigad, Justin Moore, Kazushige Terui and Yang Yue. There also were three parallel special sessions—one on model theory, non-classical logics, proof theory and constructive mathematics, one on recursion theory, and one on set theory—that together consisted of twenty-three invited thirty-minute talks. Twenty-three twenty-minute contributed talks were given.

There were 121 registered participants from Australia, Austria, China, Colombia, the Czech Republic, India, Israel, Japan, the Netherlands, New Zealand, Singapore, South Korea, Spain, the United Kingdom, and the United States.

Abstracts of the invited talks and contributed talks given (in person or by title) by members of the Association for Symbolic Logic follow.

For the Program Committee
TOSHIYASU ARAI

Abstracts of invited tutorial talks

► PETER CHOLAK, *The computably enumerable sets: A tutorial.*
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We will focus on the computably enumerable sets under inclusion, $\mathcal{E}$. By Scott Isomorphism Theorem, we know that for any countable structure there is an $\mathcal{L}_{\omega_1,\omega}$ formula, φ such that two elements are in the same orbit iff they both satisfy φ. We will explore local versions of this result within $\mathcal{E}$. The computably enumerable sets can also be explored in terms of Turing reducibility and jump classes or Turing complexity. Over the past years there have been many results relating Turing complexity, (elementary and non-elementary) definability and orbits within the structure $\mathcal{E}$. We will try to put these results into perspective. We will address what remains to be done and some possible approaches these problems.

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