

Report

(1) Name of Lecturer: Thomas Worsch

(2) Title of Lecturer: Dr.rer.nat.

(3) Affiliation: Karlsruhe Institute of Technology, Department of Informatics (Germany)

(4) Short Biography:

Thomas Worsch got his diploma and his doctoral degree from the Technical University of Braunschweig in 1985 and in 1990 respectively. Since 1989 he is working at Karlsruhe University, now Karlsruhe Institute of Technology. In 1993/94 he was a visiting professor at Giessen University. His research interests include fine grained parallel models like cellular automata and other discrete complex systems, in particular from the algorithmic and complexity theoretic points of view, and parallel processing (MPI). Since 1990 he is teaching courses on Cellular Automata, Parallel Models, Randomized Algorithms, Parallel Processing, Foundations of Computer Science, Automata Theory, and Logic. Several times he has received honors from his faculty for giving excellent courses.

(5) Subject and Schedule of the Lectures:

Five lectures on algorithmic aspects of Cellular Automata (CA) as a part of the course “Advanced Artificial Intelligence.”

Jan 16, 2012: Basics, signals and markings in CA

Jan 17, 2012: Simulations of Turing machines by CA and vice versa

Jan 18, 2012: Synchronization problems for CA

Jan 19, 2012: Sorting in one- and two-dimensional CA

Jan 20, 2012: Asynchronous and probabilistic CA

(6) Comments:

It was a challenge to give lectures not in my first language (and I think for the students to attend such a course). But it turned into an inspiring experience. It is a good thing that there are different cultures. And it is a good idea to have students get in touch with some of the differences already before leaving university. In my opinion the idea to ask foreign lecturers to teach part of a course deserves to be picked up by other universities. The organization was perfect. I'm very much obliged to Hiroshima University and to Prof. Morita and his group for their enduring support.

