

Wednesday, November 14., 2007

Root Hall A186, ISU

12:00 p.m., noon

Professor Monica Marcus

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OMEGA-AUTOMATA AND INFINITE GAMES

A central aim of computer science is to put the development of hardware and software systems on a mathematical basis which is both firm and practical. Such a scientific foundation is needed especially in the construction of reactive programs. Examples of such programs are communication protocols, control systems.

They are characterized by a perpetual interaction with their environment as well as a non-terminating behaviour. Correctness is very important and very difficult to ensure.

The theory of automata on infinite objects, in particular omega-automata, constitutes a powerful and elegant theoretical basis for the construction and analysis of reactive programs. This talk will survey a number of key issues in the theory of automata on infinite objects.

For more information write to jajcay@cayley.indstate.edu
or visit <http://marilyn.indstate.edu/jajcay/seminar.html>