ARTIFICIAL INTELLIGENCE LABORATORY

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

PHYSICS OF COMPUTATION SEMINAR

Date: Tuesday, October 22, 1996
Time: Talk at **2:30pm**
Refreshments after the talk
Place: NE43, 8th-floor AI Playroom

Different formal models of quantum cellular automata

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Quantum cellular automata (QCA) were introduced as computational models alternative to quantum Turing machines or quantum circuits. As the definition of a general quantum cellular automaton raised some problems, people defined variations of the model: partitioned QCA, QCA for finite configurations and QCA for periodic configurations. We will present these models and compare them.

Host: Seth Lloyd

This talk is part of a seminar series on adapting computers and computations to the constraints of, and opportunities afforded by, microphysics; and on the development and application of the physical theory of computation and information. This seminar series is supported by the MIT AI Lab's Reversible Computing Project, and by the MIT Quantum Computing Project. If you would like to receive electronic notice of these seminars, send email to "poc@im.lcs.mit.edu."