

MODELLING P SYSTEMS BY COMMUNICATING X-MACHINE SYSTEMS

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Abstract

In previous papers, the author proposed an original way to integrate more stream X-machines with ε -transitions into a system. The communication between the components is achieved in a structured way, namely by channels, with select constructs appearing in each communicating state. In this paper it is shown how membrane structures (*P systems*) can be modeled by communicating stream X-machine systems (*CSXMS*), stressing out in this way the power of *CSXMS*, as well as providing a natural environment for implementing membrane systems.

Keywords: *P systems; communicating X-machine systems, concurrent programming.*

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