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Franziska B. Hinkelmann* (fhinkel@vt.edu), 204 Church Street Apt. 2, Blacksburg, VA 24060. *A General Method to derive a Boolean Model from a Continuous Model for Gene Regulatory Networks.*

Traditionally gene regulation is modeled by ordinary differential equations and the solutions are tested against experimental data. Gene regulatory networks behave like a Boolean switching network (Kauffman 1969), therefore it is intuitive to model them with a Boolean network. We describe a method that transforms a system of differential equations into a Boolean network and is guaranteed to maintain the dynamics of the system. (Received September 10, 2008)