962-60-456 **Moon Jung Cho** and **Richard H Stockbridge*** (stockbri@uwm.edu), Department of Mathematical Sciences, University of Wisconsin - Milwaukee, PO Box 413, Milwaukee, WI 532010413. *Linear Programming Formulation for Optimal Stopping Problems.*

Optimal stopping problems for continuous time Markov processes are shown to be equivalent to infinite-dimensional linear programs over a space of pairs of measures under very general conditions. The measures involved represent the joint distribution of the stopping time and stopping location, and the occupation measure of the process until it is stopped. These measures satisfy an identity for each function in the domain of the generator which is sufficient to characterize the stochastic process. Finite dimensional linear programs obtained using Markov chain approximations are solved on two examples to illustrate the numerical accuracy of the linear programming formulation. (Received September 14, 2000)