1067-49-773 **Hoang Dinh Nguyen*** (`ndhoang@wayne.edu`), Dept. of Mathematics, Wayne State University, 656 W. Kirby, Rm. 1150 Faculty and Administration Building, Detroit, MI 48202. *Discrete Approximations and Optimality Conditions for the Sweeping Process.*

We consider the optimal control problem relating to sweeping process where the differential inclusion which is given by the normal cone mappings is in non-Lipschitz cases. Mainly, we discuss the optimality conditions of the optimal solution of this problem. This talk is based on the joint work with Prof. Boris Mordukhovich (Department of Mathematics, Wayne State University, USA; boris@math.wayne.edu) and Prof. René Henrion (Weierstrass Institute for Applied Analysis and Stochastics, Germany: henrion@wias-berlin.de). (Received September 14, 2010)