

Meeting: 1003, Atlanta, Georgia, SS 27A, AMS-SIAM Special Session on Analysis and Applications in Nonlinear Partial Differential Equations, I

1003-49-94 **Ram U. Verma*** (verma99@msn.com), The University of Akron, Dept. of Theoretical & Applied Mathematics, Akron, OH 44325. *Role of A-monotone mappings in nonlinear variational inclusion systems.* Preliminary report.

Based on the generalized notion of the A-monotonicity - introduced by the author - the solvability/ approximation-solvability of a system of nonlinear variational inclusion systems using the resolvent operator technique is presented. This notion significantly generalizes the maximal monotonicity. (Received August 04, 2004)