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**Ouayl Chadli\*** (o.chadli@uiz.ac.ma), Department of Economics, Ibn Zohr University, B.P. 8658, Poste Cité Dakhla, Agadir, Morocco. *Optimal Control of Quasi-Equilibrium Problems under monotonicity-type conditions with Applications.*

The main goal of this talk is to present our recent results on the study of the existence of solutions for optimal control problems governed by mixed quasi-equilibrium problems under monotonicity type conditions. More precisely, the state control system takes the general form of a mixed quasi-equilibrium problem described by the sum of a maximal monotone bifunction and a pseudomonotone bifunction in the sense of Brézis. As applications, we study the existence of solutions for optimal control problems governed by quasi-variational inequalities. Particularly, we consider the optimal control of an evolutionary quasivariational inequality described by a p-Laplacian type operator. The results obtained are new and can be applied to the study of optimal control of a variety of systems whose formulations can be presented as a mixed equilibrium problem. (Received August 03, 2020)