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**Elena Constantin\*** ([constane@pitt.edu](mailto:constane@pitt.edu)), University of Pittsburgh at Johnstown, Mathematics Department, 450 Schoolhouse Road, Johnstown, PA 15904. *Primal Necessary Conditions for a Weak Minimum for Nonsmooth Degenerate Multiobjective Problems.*

In this talk we provide primal first and second-order necessary conditions for the existence of a local weak minimum for nonsmooth multiobjective optimization problems with inequality constraints and an arbitrary constraint set. Our conditions are formulated in terms of first and second-order tangent cones in Pavel-Ursescu sense. We give a constructive characterization of the second-order tangent cone to a degenerate equality constraint set. Our characterization allows us to derive primal necessary conditions for nonsmooth multiobjective optimization problems with inequality constraints and degenerate equality constraints. In our primal necessary conditions we do not suppose any constraint qualifications or regularity conditions or any kind of differentiability of any order of the objective and inequality constraint functions. The effectiveness of our results is illustrated on an example. (Received August 24, 2020)