Singularities of parametric optimization and their applications

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Many processes of various natures depend on parameters. Under an optimization of the processes with respect to some objective functional the resulting functions also depend on the parameters. Even when initial objects are smooth or sufficiently smooth this function could be non-differentiable or even have discontinuities.

The talk is devoted to classification of generic singularities of solutions for smooth optimization problem with explicit or implicit constraints in the equality form and the applications of these singularities.