# A Quantile Goodness-of-fit Test Applicable to Distributions with Non-Differentiable Densities.

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*Abstract*: Stochastic programming problems with individual probability constraints belong to a class of optimization problems depending on a random element only through the corresponding probability measure. Consequently, the probability measure can be treated as a parameter in these problems.

The aim of the paper is to investigate the stability of the above mentioned problems with respect to the distribution functions space. The main effort is directed to some special situations in which stability investigation can be reduced (from the mathematical point of view) to one dimensional case. The Kolmogorov metric is employed to specify the stability results and, moreover, the achieved stability results are applied to statistical estimates of the optimal value and the optimal solution.