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(guzinb@sie.arizona.edu). *Bias reduction in optimality gap estimation for stochastic programs.*

Monte Carlo sampling-based estimators of optimality gaps for stochastic programs are known to be biased. We present a method for reducing the bias of the estimators produced by the Averaged Two-Replication Procedure (A2RP) via a probability metrics approach, which can be done in polynomial time in sample size. Theoretical and computational results will be highlighted. (Received September 26, 2012)