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Darinka Dentcheva* (darinka.dentcheva@stevens.edu), Department of Mathematical Sciences, Stevens Institute of Technology, Hoboken, NJ 07030. *Distributed augmented Lagrangian method with applications to stochastic programming.*

A novel distributed method for convex optimization problems with a certain separability structure is presented. The method is based on the augmented Lagrangian framework. We analyze its convergence and provide numerical comparison to other known decomposition methods. Special attention will be placed on the application of the method to several types of stochastic programming problems. (Received September 14, 2014)