

1137-49-217 **Milagros Loreto*** (mloreto@uw.edu), 18115 Campus Way NE, Bothell, WA 90011, and **Yiting Xu** (xyt@uw.edu) and **David Kotval** (dhk2e@mtmail.mtsu.edu). *Spectral Subgradient Method for Unconstrained Optimization*.

The spectral subgradient method combines the classical subgradient approach with the spectral step length, which does not require any previous knowledge of the optimal value, to solve nonsmooth unconstrained minimization problems. We focus on the interesting case where the objective function is convex and continuously differentiable almost everywhere, but often non-differentiable at minimizers. We present numerical results on different sets of nonsmooth functions to compare our proposed method with other traditional subgradient methods, showing that using the spectral step length can improve the quality of the solution found (Received February 04, 2018)