Comparisons with a Distributed Subgradient

Algorithm from Nedić Ozdaglar, *Distributed subgradient methods for multi-agent optimization* (2009)

1. $\mathbf{x}^{(c)}(k) = P\mathbf{x}(k)$ (consensus step)
2. $x_i(k+1) = x_i^{(c)}(k) - \frac{\rho}{k} f_i'\left(x_i^{(c)}(k)\right)$ (local gradient descent)

Numerical comparison