Numerical Algorithms (2022) 90:879–880
https://doi.org/10.1007/s11075-021-01241-3

CORRECTION

Correction to: On the best achievable quality of limit points of augmented Lagrangian schemes

Roberto Andreani[1] · Gabriel Haeser[2] · Leonardo M. Mito[2] · Alberto Ramos[3] · Leonardo D. Secchin[4]

Published online: 20 December 2021

The published article "R. Andreani, G. Haeser, L. M. Mito, A. Ramos, L. D. Secchin. On the best achievable quality of limit points of augmented Lagrangian schemes. *Numer. Algor.*, 2021. https://doi.org/10.1007/s11075-021-01212-8" has the errors listed below. The authors apologize for that.

– Step 1, Algorithms 2 and 3: $\|\tilde{V}^{i_k-\frac{1}{2}}\|_\infty \leqslant \varepsilon_k$ should be $\|\nabla L_{\rho_k,\bar{\lambda}^k,\bar{\mu}^k}(x^k)\|_\infty \leqslant \varepsilon_k$
– Expression (11): $\frac{\|x^k-x^*\|_2}{\rho_k} \to 0$ should be $\frac{\|(\bar{\lambda}^k,\bar{\mu}^k)\|_2}{\rho_k} \to 0$

The original article can be found online at https://doi.org/10.1007/s11075-021-01212-8.

✉ Roberto Andreani
andreani@unicamp.br

Gabriel Haeser
ghaeser@ime.usp.br

Leonardo M. Mito
leokoto@ime.usp.br

Alberto Ramos
albertoramos@ufpr.br

Leonardo D. Secchin
leonardo.secchin@ufes.br

[1] Department of Applied Mathematics, University of Campinas, Rua Sérgio Buarque de Holanda, 651, 13083-859, Campinas, SP, Brazil

[2] Department of Applied Mathematics, University of São Paulo, Rua do Matão, 1010, Cidade Universitária, 05508-090, São Paulo, SP, Brazil

[3] Department of Mathematics, Federal University of Paraná, 81531-980, Curitiba, PR, Brazil

[4] Department of Applied Mathematics, Federal University of Espírito Santo, Rodovia BR 101, Km 60, 29932-540, São Mateus, ES, Brazil

- Paragraph after Theorem 5: $\|\bar{\lambda}^k, \bar{\mu}^k\|_2 = O(\rho_k^\beta)$, should be $\|(\bar{\lambda}^k, \bar{\mu}^k)\|_2 = O(\rho_k^\beta)$ and $\|x^k - x^*\|_2 = O(\rho_k)$ should be $\|(\bar{\lambda}^k, \bar{\mu}^k)\|_2 = O(\rho_k)$
- Expression (16): $\|\tilde{V}^{i_k - \frac{1}{2}}\|_\infty \to 0$ should be $\|\text{proj}_{\Omega(x^k)}(x^k - \nabla f(x^k)) - x^k\|_\infty \to 0$
- Definition of $K^P(x, \alpha, \beta)$, after Theorem 7: $\|x^k - x^*\|_2$ should be $\|(1, \lambda, \mu)\|_\infty$
- Item 2. after Definition 1: $\{\lambda^k, \mu^k\}_{k\in\mathbb{N}}$ should be $\{(\lambda^k, \mu^k)\}_{k\in\mathbb{N}}$
- Example 1 and step 2 of Algorithm 3: $\bar{\mu_1^k}$, $\bar{\mu_2^k}$ and $\bar{\mu_p^k}$ should be $\bar{\mu}_1^k$, $\bar{\mu}_2^k$ and $\bar{\mu}_p^k$, respectively