



Erratum to “Optimality and Duality for Second-order Multiobjective Variational Problems” [1]

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In the proof of Theorem 3 on page 794 [1], the system

$$\begin{aligned} g_x(t, \bar{x}, \dot{\bar{x}})\bar{y}(t) - D(g_x(t, \bar{x}, \dot{\bar{x}})\bar{y}(t)) &= 0, \quad t \in I, \\ \bar{y}(t)^T g(t, \bar{x}, \dot{\bar{x}}) &= 0, \quad t \in I, \\ (\bar{\lambda}^1, \bar{\lambda}^2, \dots, \bar{\lambda}^k, \bar{y}(t)) &\geq 0, \quad t \in I, \end{aligned}$$

has been printed instead of

$$\begin{aligned} \bar{\lambda}^1(f_x^1(t, \bar{x}, \dot{\bar{x}}) - Df_x^1(t, \bar{x}, \dot{\bar{x}})) + \sum_{i=2}^k \bar{\lambda}^i(f_x^i(t, \bar{x}, \dot{\bar{x}}) - Df_x^i(t, \bar{x}, \dot{\bar{x}})) \\ + g_x(t, \bar{x}, \dot{\bar{x}})\bar{y}(t) - D(g_x(t, \bar{x}, \dot{\bar{x}})\bar{y}(t)) &= 0, \quad t \in I, \\ \bar{y}(t)^T g(t, \bar{x}, \dot{\bar{x}}) &= 0, \quad t \in I, \\ (\bar{\lambda}^1, \bar{\lambda}^2, \dots, \bar{\lambda}^k, \bar{y}(t)) &\geq 0, \quad t \in I, \end{aligned}$$

References

- [1] T Gulati and G Mehndiratta. Optimality and Duality for Second-order Multiobjective Variational Problems. *European Journal of Pure and Applied Mathematics*, 3(5): 786-805. 2010.

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