

Mathematical Programming MS # 0151
Galley Corrections

Title: On the superlinear convergence of the variable metric proximal point algorithm using Broyden and BFGS matrix secant updating

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Corrections:

Page 9: In Part (e) of Lemma 1, the subscript on the symbol D should be k , not λ . The correction is

$$\|w^k - D_k(z^k)\| \leq \delta_k \|w^k\| \leq \delta_k L_0 \|s^k\|$$

Page 10: The fourth sentence of the second paragraph on this page should read as follows:

Clearly, $\|D_\lambda(z^k)\| \rightarrow 0$ by (H3) and (c).

Page 20: The first part of the sentence beginning on line 7 in the *Proof of Theorem 6* (just after display (34)) should be changed to read as follows:

Since $z^k \rightarrow \bar{z}$ and $\|w^k\| \rightarrow 0$, Step 4 of the algorithm implies that there must be a ...

Page 23: The third sentence in the proof of Theorem 7 should read as follows:

To apply Theorem 6, we must show that (32) is satisfied for all k sufficiently large where the sequence $\{\beta_k\}$ is defined in (30).