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ERRATA TO "METRIC CHARACTER OF HAMILTON–JACOBI EQUATIONS"

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The formula defining the distance S must be corrected as follows:

$$\text{(new 3.2)} \qquad \Im_x^T(\eta,\gamma)=\int_0^T -\gamma[\eta]\eta-|\gamma[\eta]|d_E^{\#}(\eta,Z(\xi(\eta,\gamma,x,\cdot)))\mathrm{d}t,$$

$$\text{(new 3.3)} \qquad S(y,x)=\inf_{\gamma\in\Gamma_{x,y}}\sup_{\eta\in B}\Im_x(\eta,\gamma).$$

The dynamical programming principle stated in Proposition 3.4 then becomes:

For any $x,y\in\mathbb{R}^N$ and $T>0$

$$\text{(new 3.7)} \qquad S(y,x)=\inf_{\gamma\in\Gamma^T}\sup_{\eta\in B^T}\left\{\Im_x^T(\eta,\gamma)+S(y,\xi(\eta,\gamma,x,T))\right\}.$$

With these changes Theorems 4.1 and 4.2 hold true, while Lemma 4.1 must be erased. The proofs in Sections 3 and 4 require minor changes that can be easily detected. Sections 1, 2 and 5 stay unchanged.

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References

[1] A. Siconolfi, "Metric character of Hamilton–Jacobi equations", *Trans. Amer. Math. Soc.* **355** (2003), pp. 1987–2009.

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