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Journal of Mathematical Analysis and Applications

journal homepage: www.elsevier.com/locate/jmaa

Corrigendum

Corrigendum to “Exact and approximate controllability of the age and space population dynamics structured model” [J. Math. Anal. Appl. 275 (2) (2002) 562–574]

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ARTICLE INFO

Article history:

Available online 10 May 2012

Submitted by R.M. Aron

- Theorem 2.1 and Theorem 2.2. Add the condition $T \geq A$.
- Lemma 2.1. Add the term $C \int_{\Omega \times (0, \delta)} g^2(a, x) dadx$ to the right hand side of inequality (3), where δ is an arbitrary small value in $(0, A)$.
- Section 3. Add $e^{s\alpha} w(0, t, x) \beta(a, t, x)$ to the right hand side of the first equation in (6).
Consequently add $e^{s\alpha} w(0, t, x) \beta(a, t, x)$ to f_s and note that

$$\|f_s\|^2 \leq \|of_s\|^2 + C \|w^2(0, t, x)\|^2$$

where

$$of_s = ks\lambda\varphi v \Delta\psi + \mu(a, t, x)v + ks\lambda^2\varphi v |\nabla\psi|^2.$$

From the implicit representation of w , and in a very similar way than in the proof of lemma 1 [4], one gets

$$\int_{\Omega \times (0, t)} w^2(0, s, x) dsdx \leq C \int_{\Omega \times (0, t)} g(a, x)^2 dadx$$

when $t \leq A$, and

$$\int_{\Omega \times (0, A)} g(a, x)^2 dadx \leq \frac{C}{\delta^2} \left(\int_{(0, \delta) \times (0, T) \times \Omega} w^2(a, t, x) dadtdx + \delta^2 \int_0^\delta \int_\Omega g(a, x)^2 dadx \right).$$

For s large enough one obtains the New Carleman Estimate of Lemma 2.1.

DOI of original article: [10.1016/S0022-247X\(02\)00238-X](https://doi.org/10.1016/S0022-247X(02)00238-X).

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0022-247X/\$ – see front matter

doi:[10.1016/j.jmaa.2012.01.059](https://doi.org/10.1016/j.jmaa.2012.01.059)