

Misprints

October 23, 2010

Page 11, line 10, a comma is missing after “by induction on i ”.

Page 17, in the definition of M , “ $-n + 1$ ” has to be replaced by “ $-n + 2$ ”. Hence the definition of M is

$$M := \begin{pmatrix} 1 & p_1 & p_1(p_1 - 1) & \dots & p_1(p_1 - 1)(p_1 - 2) \dots (p_1 - n + 2) \\ 1 & p_2 & p_2(p_2 - 1) & \dots & p_2(p_2 - 1)(p_2 - 2) \dots (p_2 - n + 2) \\ \vdots & \vdots & \vdots & \vdots & \vdots \\ 1 & p_n & p_n(p_n - 1) & \dots & p_n(p_n - 1)(p_n - 2) \dots (p_n - n + 2) \end{pmatrix}.$$

Page 20, in (2.20), “ $\int_0^T (y(0, x) - y^0(x))\phi(0, x)dx$ ” has to be replaced by “ $\int_0^L (y(0, x) - y^0(x))\phi(0, x)dx$ ”.

Page 26, a dot is missing at the end of the formula line -14.

Page 47, line 13, “ $C^0([0, \eta/2], H^3(0, L))$ ” has to be replaced by “ $C^0([0, \eta/2]; H^3(0, L))$ ”.

Page 52, in (2.198), “ $\mathcal{L}(U, D(A^*))$ ” has to be replaced by “ $\mathcal{L}(U; D(A^*))$ ”.

Page 58, line -4, “ $H_3 \text{ int } H_2$ ” has to be replaced by “ $H_3 \text{ into } H_2$ ”.

Page 53, line 5, $A^*\phi$ has to be replaced by $A^*\varphi$.

Page 79, equation (2.393) has to be deleted.

Page 82, in equation (2.420), a_n has to be replaced by a_l , and \mathbb{R}^n has to be replaced by \mathbb{R}^l .

Page 95, line 8, $H_0^1(I; \mathbb{C}) := \{\varphi \in H^1((0, L); \mathbb{C}); \varphi(0) = \varphi(L)\}$ has to be replaced by $H_0^1(I; \mathbb{C}) := \{\varphi \in H^1(I; \mathbb{C}); \varphi(-1) = \varphi(1) = 0\}$.

Page 109, line 11, $\frac{L|M|}{2\pi\varepsilon}$ has to be replaced by $\frac{L|M|}{\pi\varepsilon}$.

Page 128, in Example 3.9, (ϕ, θ, ψ) has to be replaced by $(\phi, \theta, \psi)^{\text{tr}}$. Similarly, $(\omega_1, \omega_2, \omega_3)$ has to be replaced by $(\omega_1, \omega_2, \omega_3)^{\text{tr}}$.

Page 132. In (3.30), $\varepsilon\eta^{k+1}$ has to be replaced by $(-1)^k\varepsilon\eta^{k+1}$ and $|\eta|$ can be replaced by η ; line -13, $\varepsilon \in [0, \varepsilon_0]$ has to be replaced by $\varepsilon \in [-\varepsilon_0, \varepsilon_0]$; line -8, $-\eta\varepsilon$ has to be replaced by $\eta\varepsilon$; line -6 and line -5, $(-1)^k$ has to be deleted; line -4, $\varepsilon \in [0, +\infty)$ has to be replaced by $\varepsilon \in (-\infty, +\infty)$; in (3.32), $(-1)^k$ has to be deleted and $\varepsilon\eta^{k+2}$ has to be replaced by $|\varepsilon|\eta^{k+2}$.

Page 133. Lines 1-2, $\eta = \varepsilon^{1/(2k+2)}$ has to be replaced by $\eta = |\varepsilon|^{1/(2k+2)}$; in (3.34), $\varepsilon^{3/2}$ has to be replaced by $(-1)^k\varepsilon|\varepsilon|^{1/2}$ and $O(\varepsilon^{(3/2)+(1/(2k+2))})$ has to be replaced by $O(|\varepsilon|^{(3/2)+(1/(2k+2))})$.

Page 142, line 6 “Our” has to be replaced by “Our”.

Page 145

$$\text{Span} \{b_1, S(b_1)J^{-1}b_1S(\omega)J^{-1}\omega; \omega \in \text{Span} \{b_1, S(b_1)J^{-1}b_1\}\}$$

has to be replaced by

$$\text{Span} (\{b_1\} \cup \{S(\omega)J^{-1}\omega; \omega \in \text{Span} \{b_1, S(b_1)J^{-1}b_1\}\}).$$

Page 152, in Corollary 3.41, “ T_0 ” has to be replaced by “0” and “ T_1 ” has to be replaced by “ T ”. Moreover a comma is missing after “ $x(T_0) = x^0$ ”.

Page 196, line 10, “if $\int_0^T \alpha(t)dt$ is large enough” has to be added after “around \bar{y} is controllable”

Page 199, line -12, “In [244,245],” has to be removed.

Page 208, line -4, “ $g \in C^2([0, 1]; \mathbb{R})$ ” has to be replaced by “ $g \in C^2([0, 1]; \mathbb{R})$ ”.

Page 210, line 10, “ $g \in C^2([0, 1]; \mathbb{R})$ ” has to be replaced by “ $g \in C^2([0, 1]; \mathbb{R})$ ”.

Page 210, line 10, “ $g_1 \in C^1([0, 1]; \mathbb{R})$ ” has to be replaced by “ $g_1 \in C^1([0, 1]; \mathbb{R})$ ”.

Page 210, line 13, “ $g_2 \in C^0([0, 1]; \mathbb{R})$ ” has to be replaced by “ $g_2 \in C^0([0, 1]; \mathbb{R})$ ”.

Page 236, line 16, " $v^1 \in L^\infty((0, T); \mathbb{R}^m)$ " has to be replaced by " v^1 and v^2 , both in $L^\infty((0, T); \mathbb{R}^m)$ ".
 Page 275, line -16, "the set of polynomials" has to be replaced by "the set of real polynomials".
 Page 288, line 13, "dynamic feedback laws" has to be replaced by "dynamic output feedback laws".
 Page 297, line - 11, "and Theorem 3.18 on page 134-135" has to be added after page 135.
 Page 302, in (11.75), " $\forall x \in \mathbb{R}^n$ " is missing.
 Page 311, line 2, " $(x_1, r_2, t) \in \mathbb{R}^3$ " has to be replaced by " $(x_1, x_2, t)^{\text{tr}} \in \mathbb{R}^3$ ".
 Page 336, line -6, "but where the method introduced" has to be replaced by "where, however, the method".
 Page 348, line 1, " $\mathcal{L}(U, D(A^*))$ " has to be replaced by " $\mathcal{L}(U; D(A^*))$ ".
 Page 368, in Lemma 13.15, " $|a(t, x)| + |b(t, x)| < \delta_3$ " has to be replaced by " $|a(t, x)| + |b(t, x)| + |a_x(t, x)| + |b_x(t, x)| < \delta_3$ ".
 Page 368, line -3, "Proposition 1.18" has to be replaced by "Proposition 1.3".
 Page 387, line -11, " $b' \in \mathbb{R}^n$ " has to be replaced by " $b' \in \mathbb{R}^n$ ".
 Page 404, in reference [150], "Karlsruhe" has to be replaced by "Karlsruhe".
 Page 405, in the title of the reference [200], "controllabilty" has to be replaced by "controllability".
 Page 416, the two references [416] and [417] are the same.
 Page 421, line 14 " $H_0^1(I; \mathbb{C})$ set of φ in $H^1(I; \mathbb{C})$ such that $\varphi(0) = \varphi(L) = 0$ " has to be replaced by " $H_0^1(I; \mathbb{C})$ set of φ in $H^1(I; \mathbb{C})$ such that $\varphi(-1) = \varphi(1) = 0$ "