

Differential Dynamical Systems Errata (Second Printing)

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November 6, 2009

Abstract

Errors are listed by page and line number. The symbol \implies means “replace with”. A negative line number means count from the bottom of the page. Equation lines are counted as one line.

Note that the first printing has 10 9 8 7 6 5 4 3 2 1 on the copyright page. The second printing is out in March 2009, and has 10 9 8 7 6 5 4 3 2 on the copyright page.

Chap.	Page	Line	Change	Thanks to
1	66	-6	$M^2 = e^{TR} \implies M^2 = e^{2TR}$	MS
3	76	-4	For a function \implies If a function	TB
	76	-3	the derivative at \implies is differentiable then the derivative at	TB
	78	-2	normed space \implies metric space	TB
	92	16	on $J = [t_o - a, t_o + a] \implies$ on $J = [t_o - c, t_o + c]$	
	92	-14	for $t \in J$ and $a = b/M \implies$ for $t \in [t - a, t + a]$ and $a = \min(c, b/M)$	TB
	92	-6	before "This result" add the sentence: "Using Picard iteration or Theorem 3.18, the interval of existence can be extended to the entire interval J ."	TB
	94	-3	$b \implies g$	TB
	96	-5	Before "Consequently" add the sentence: "However since $u \in B_b(x_o)$ then, by an argument sketched in Exercise 2, f is uniformly C^1 on this compact set and we can assume that $\delta(\varepsilon)$ only."	TB
	96	4	$= \delta(\varepsilon, b) \implies = \delta(\varepsilon)$	
	99	7	$B_b(x_o) \implies B_{b_o}(x_o)$ (Two places!)	AGH
99	7	$\lim_{t \rightarrow a_o} \implies \lim_{t \rightarrow t_o + a_o}$	MS	
103	12	In the exponent, $2K$ should be K .	RC	
4	107	-10	the orbit (4.2). \implies the orbit Γ_x .	MS
	110	4	defines a complete flow \implies exists for all $t \in \mathbb{R}$	MS
	110	10	Theorem 3.17 \implies Theorem 3.18	JA
	110	-10	The vector field F defines a flow on $\mathbb{R}^n \implies$ The solutions exist for all $t \in \mathbb{R}$	MS
	111	11	and therefore define a flow. \implies and therefore, if $f \in C^1$, define a flow.	MS
	111	-11	Theorem 3.17 \implies Theorem 3.18	JA
	113	-1	when E^c is empty \implies when E^c is trivial	RC2
	122	11	$ y_o \leq \delta \implies y_o \leq \delta$	
	130	Ftnt 24	"continuous, bijective map that" \implies "continuous, bijective map between compact sets that"	SS
	131	4	"itself, and thus" \implies "itself with a C^1 inverse, and thus"	SS
	136	-7	$= (h_2(x_1, x_2) + tx_2) \implies = (h_1(x_1, x_2) + tx_2)$	SS2
	145	-16	$\in \omega(s) \implies \in \omega(x)$	MS
	148	18	$\omega(x) \in B \implies \omega(x) \subset B$	MS
	148	-16	Lemma 4.14 \implies Lemma 4.15	MS
148	-6	"is a subset M of N " \implies is a neighborhood $M \subset N$	MS	
5	173	-11	$Df(x_o) = A \implies Df(x^*) = A$	TB
7	245	-8	$\theta_1(t_n) = \alpha_n \implies \theta_1(t_n) = \alpha_1$	TB
8	186	3	where E^c is empty. \implies where E^c is trivial.	MS
	186	5	where E^c is not empty. \implies where E^c is not trivial.	MS
	190	-7	$\dot{z} = z \implies \dot{z} = \lambda z$	MS
	269	-11	that as $\mu \rightarrow \infty \implies$ that as $\mu \rightarrow -\infty$	SS2
	274	19	$= Dh f(x; p(\nu)) \implies = Dh(x; p(\nu)) f(x; p(\nu))$	MS
	274	20	of $(0, 0)$. \implies of $(0, 0)$, recall (4.34).	MS
	280	Fig 8.7	$\alpha(\mu) \implies m(\mu)$	MS
	280	-1	Using the definition (8.16) of m , \implies Using $m(\mu) = f(\xi(\mu); \mu)$,	MS

Chap.	Page	Line	Change	Thanks to
9	361	8	$(2n - 1)n \implies (2n + 1)n$	
	362	4	$(2n - 1)n \implies (2n + 1)n$	
	371	-8	$ m \cdot \omega > c \implies m \cdot \omega \geq c$	
	371	-7	The set $\mathcal{D}_{c,\tau}$ is a \implies The set $\mathcal{D}_{c,\tau} \cap \mathbb{S}^{n-1}$ is a	
	371	-1	$> \frac{d}{ q ^{\tau+1}} \implies \geq \frac{d}{2 q ^{\tau+1}}$	
	372	1	with $d = c/\omega_2 \implies$ with $d = 2c/\omega_2$	
	372	4	$[0, d/2]$ and $[1- \implies [0, d/2)$ and $(1-$	
App	394	3	<code>meshgrid(-pi,pi/10,pi)</code> \implies <code>meshgrid(-pi:pi/10:pi)</code>	JA