# Differential Dynamical Systems - Revised Edition (2nd Printing) 

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Errors are listed by page and line number. The symbol $\Longrightarrow$ means "replace with". A negative line number means count from the bottom of the page. Each equation line is counted as one line and footnotes are not counted

The second printing (Nov 2019) of the Revised Edition has 1098765432 on the copyright page.

| Ch. | Page | Line | Change | Thanks |
| :---: | :---: | :---: | :---: | :---: |
| 1 |  | $\begin{gathered} -14 \\ 7 \end{gathered}$ | 'of the population" $\Longrightarrow$ per individual in the population "every monotone, bounded function" $\Longrightarrow$ every continuous monotone, bounded function |  |
| 2 | $\begin{aligned} & 39 \\ & 54 \end{aligned}$ | $\begin{aligned} & 16 \\ & -4 \end{aligned}$ | the original matrix $T \Longrightarrow$ the original matrix $A$ gives $U=\Longrightarrow$ gives $S=$ | USF |
| 3 | $\begin{aligned} & 75 \\ & 75 \\ & 82 \\ & 91 \\ & \\ & 97 \end{aligned}$ | $\begin{gathered} 8 \\ -8 \\ -10 \\ -13 \\ -12 \end{gathered}$ | $\begin{aligned} & (3.5) \Longrightarrow(3.4) \\ & +\left\|f_{n}(y)-f(y)\right\|<\Longrightarrow+\left\|f_{n}(y)-f^{*}(y)\right\|< \end{aligned}$ <br> For the first proof will $\Longrightarrow$ For the first proof we will solutions $u: J \times B_{b / 2}\left(x_{o}\right) \rightarrow B_{b}\left(x_{o}\right) . \Longrightarrow$ solutions $u: J \times$ $B_{b / 2}\left(x_{o}\right) \rightarrow B_{b}\left(x_{o}\right)$ of (3.27). <br> (b) $f_{n}=\Longrightarrow f_{n}(x)=$ | USF |
| 4 | $\begin{aligned} & 104 \\ & 127 \end{aligned}$ | $\begin{aligned} & 17 \\ & 15 \end{aligned}$ | $x$ in $n$-dimensional the phase $\Longrightarrow x$ in the $n$-dimensional phase is, there is a surjective map $\tau: A \times \mathbb{R} \rightarrow \mathbb{R}$ that is monotone $\Longrightarrow$ is, for each $x \in A$, the map $\tau(x, \cdot): \mathbb{R} \rightarrow \mathbb{R}$ is surjective and monotone | $\begin{aligned} & \text { USF } \\ & \text { USF } \end{aligned}$ |
|  | 128 | 3 | correspondence, and if and only if the $\Longrightarrow$ correspondence, and the | USF |
|  | 133 | 2 | we begin with an ODE $\Longrightarrow$ we begin by taking $x^{*}=0$ and with an ODE | USF |
|  | 133 | 15 | Suppose first that $H$ is a $\Longrightarrow$ Suppose first that $h=H_{1}$ is a | USF |
|  | 143 | 22 | $t \geq T \Longrightarrow t \geq T_{\text {max }}$ | DS |
|  | 154 | -9 | $\rightarrow \mathbb{S} \times R \Longrightarrow \rightarrow \mathbb{S} \times \mathbb{R}$ | USF |


| Ch. | Page | Line | Change | Thanks |
| :---: | :---: | :---: | :--- | :---: |
| 6 | 221 | 2 | in $(6.42):=\cos (\theta) \Longrightarrow=\sin (\theta)$ | GD |
|  | 221 | 6 | $\cos ^{m}(\theta) \Longrightarrow \cot ^{m}(\theta)$ | GD |
|  | 225 | -4 | $( \pm 1 / \sqrt{3}, \pm 2 / \sqrt{3}) \Longrightarrow( \pm 1 / \sqrt{3}, \pm \sqrt{2 / 3})$ | GD |
| 8 | 263 | 24 | even though $f$ formally $\Longrightarrow$ even though $g$ formally |  |
|  | 272 | 4 | Thus for example $\Longrightarrow$ Thus for example for $(x, y) \in \mathbb{R}^{2}$, |  |
|  | 287 | -4 | of the form $(5.36) \Longrightarrow$ of the form $(5.36)$ |  |
|  | 289 | Fig 8.12 | Caption should say "top" and "bottom" instead of left and right | USF |
|  | 304 | 5 | $\gamma_{o} \subset \Longrightarrow \eta_{o} \subset$ |  |
|  | 304 | 7 | $z \in \gamma_{o} \Longrightarrow z \in \eta_{o}$ |  |
|  | 304 | 13 | For any $q \in \Gamma_{o} \Longrightarrow$ For any $q \in \eta_{o}$ |  |
|  | 305 | 11 | $=\varphi_{t}(q, \theta)+\varepsilon \Longrightarrow=\varphi_{t}(q)+\varepsilon$ |  |
|  | 306 | $14(8.87)$ | $\frac{d}{d \varepsilon}\left(f\left(\psi_{t}\left(s_{\varepsilon}(\theta), \theta\right)\right) \Longrightarrow \frac{d}{d \varepsilon}\left(f\left(\psi_{t}\left(s_{\varepsilon}(\theta)\right)\right)\right.\right.$ |  |
| 9 | 327 | 13 | (Sketch $: \mathrm{B}) \Longrightarrow(\operatorname{Sketch}$ of Proof) |  |
|  | 330 | 22 | We will show that action $\Longrightarrow$ We will show that the action | USF |
|  | 351 | -2 | the vector $\eta(t)=e^{-t K} \eta(0) \Longrightarrow$ the vector $\eta(t)=e^{t K} \eta(0)$ (i.e. |  |
|  |  |  | remove the $-\operatorname{sign)}$ |  |

