Changes, typos, errata (ebook version)

(whose changes not included on time during layout)

October 12, 2011

Page 25, suppress the sentence after equation (1.44), and replace by*:*
"An initial condition vector in the same direction as ξ_i, has a response in the direction of ξ_i with a "speed of response" of λ_i."

Page 40, after (1.69) in line 3, replace "$\gamma_1 = a_1/\alpha$" by "$\gamma_p = a_p/\alpha$"

Page 40, in (1.71), change the index in the first sum "$\sum_{k=1}^{\infty}$" by "$\sum_{k=p}^{\infty}$".

Page 107, in 1.27.2, instead of "$\phi_t = M \to M$" write "$\phi_t : M \to M$".
instead of "the action of ϕ_{τ_1} and ϕ_{τ_1}" write "the action of $\boldsymbol{\varphi}_{\tau_1}$ and $\boldsymbol{\varphi}_{\tau_2}$"

Page 109, line four, instead of "$2\pi/a$" write "$2\pi/b$".

Page 164, after "if $|\lambda_i|>1$" delete: "then $\mathbf{D}^k \to \mathbf{0}$ as $k \to \infty$. Moreover,"

Page 165, Theorem 1.13, in (1.326) replace "$\dot{\mathbf{x}}_u = -\mathbf{x}_u$" by "$\dot{\mathbf{x}}_u = +\mathbf{x}_u$".
Replace "if $\mathrm{Det}\mathbf{A}_i > 0$ ($\mathrm{Det}\mathbf{A}_i > 0$)." by "if $\mathrm{Det}\mathbf{A}_i > 0$ ($\mathrm{Det}\mathbf{A}_i < 0$)."

Page 166, In Theorem 1.15, replace "$N' \subseteq U$" by "$N' \subseteq \mathbb{R}^n$".

Page 167, line 8 replace "to be hyperbolic point of $\mathbf{g}$" by "to be hyperbolic periodic point of $\mathbf{g}$".

Page 171, line 4 replace "$\overset{\cdot\smile}{(\mathbf{g}\cdot\boldsymbol{\rho})}_i(t)=\check{\mathbf{g}}_i\cdot(\check{\boldsymbol{\rho}}_i(t))$" by "$\overset{\smile}{(\mathbf{g}\cdot\boldsymbol{\rho})}_i(t) = \check{\mathbf{g}}_i(\check{\boldsymbol{\rho}}_i(t))$".

Pages 172,173,174, in eq. (1.340),(1.341),(1.343),(1.344),(1.346),(1.347), the signs of inequalities must be inverted.

Page 509: correct "whose structure are of nonlinear type" as follows:
"whose structures are of nonlinear type."

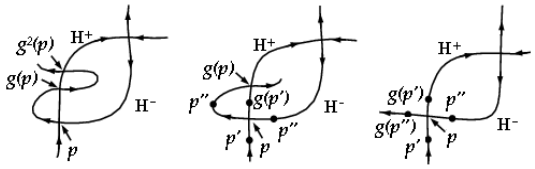
Page 221, in the paragraph, replace "*local map" by "local chart",*
"(Ω, φ) will be a *local map* ", replace by "(Ω, φ) will be a *local chart* .."

Page 221 "The map f is C^r **is** it is C^r at any point .", please replace by "The map f is C^r **if** it is C^r at any point.

Page 260: please replace " $\lim_{x\to+\infty} F(x) = 0$" by " $\lim_{x\to-\infty} F(x) = 0$"

Page 720, please add the sign "-" in the exponent of:
$c_n = \frac{1}{2\pi}\int_{\alpha}^{\alpha+2\pi} e^{i\omega t} f(t)dt$, replace by: $c_n = \frac{1}{2\pi}\int_{\alpha}^{\alpha+2\pi} e^{-i\omega t} f(t)dt$

Page 154, in the picture;
(middle-picture): at the bottom, the point p" must be replaced by p'.
(right-picture): At the bottom, the point p" must be replaced by p'; that gives:



Page 654, after the word "*real*", please insert: "α_0 *such that*", as follows:
Hausdorff-Besicovitch dimension (or fractal dimension): It is for F the *real* α_0 such that $m_\alpha(\mathrm{F}) = +\infty$ if $\alpha < \alpha_0$ and $m_\alpha(\mathrm{F}) = 0$ if $\alpha > \alpha_0$. It is Besicovitch who showed the existence of such a *real number* α_0 ..

Page 23 replace "1.3.2 Linearization Generalized to ~~All Nonlinear~~ Models" by: "1.3.2 Linearization Generalized to State Space Models".

Page 54, (1) suppress "y" as follows: " the~~y~~ key is that two . . . ". (2) and add *"s"* in "for the three state case.", as follows: "for the three state cases."

Page 137, in the upper part, delete "Cobweb diagram", as follows:
"Indeed for α=4 the responses occupy ~~Cobweb diagram~~ the ...."

Page 318, footnote 20, in the phrase ".. the frequencies λ, that are more or less length ...", the word "length" must be replaced by "long"

Page 391, in the footnote 29, suppress "a" as follows:
".. the logarithms of the prices of ~~a~~ "futures" contracts of Japanese yen ..".

Page 511, please suppress "s" as follows: "+ indirect~~s~~ taxes"

Page 466, the following caption of Fig. 5.57 is cropped:
"Fig.5.57 3D: ARMA(2,1) Cumulants (left), ARMA(2,1) Trispectrum (right)"

Page 697, in the 2nd theorem:
replace "$\frac{f(x)-f(a)}{(x-a)^n}$" by "$\frac{f(x)-p(x)}{(x-a)^n}$"

Page 613, obviously, the entire sentence must be taken as a trivial short-cut:
"A. Smith attributed an important responsibility to these leaders ... "

Page 655, after the def. of normed vector space, delete the "s" in "metric~~s~~":
"The normed spaces are thus metric~~s~~,.."

Page 658, in (A.30), please replace $\mathbf{x}_{n+1}$ by $\mathbf{x}_m$, which becomes then:

$$\|\mathbf{x}_m - \mathbf{x}_n\| \leq c^{n-1} \cdot \frac{\|\mathbf{x}_2 - \mathbf{x}_1\|}{1-c} \qquad \text{(A.30)}$$

Page 657, in the 3rd line, preferably replace $L^p[a,b]$ by $\mathcal{L}^p[a,b]$, thereby: *", and is denoted* $\mathcal{L}^p[a,b]$."

Page 654, at the 8th line *"*(When F is a regular injective *nappe..*" must be replaced by (When F is a regular injective *patch ...*".
Footnote 11 concerned French book version, and must be deleted here.
Footnote 11 gives the def. of *nappe* and not that of *patch,* to disambiguate, French word "*nappe*" has two different meanings: (1) the same as *nappe* in Eng. (in geometry), (2) and *patch* in Eng. (in differential geometry).

Page 678, (see above) twice the term "patch" must replace "nappe"

Page 668, in 2nd Cauchy-Riemann condition, read "$\frac{\partial u}{\partial x_2}(a_1,a_2) = -\frac{\partial v}{\partial x_1}(a_1,a_2)$" instead of "$\frac{\partial u}{\partial x_2}(a_1,a_2) = -\frac{\partial v}{\partial x_2}(a_1,a_2)$."

Page 680, read "extended complex plane" instead of "complete plane"
Page 681, idem as above.

Page 669, in the proposition A.4, replace "$|z-a| > r$," by "$|z-a| < r$".

Page 672, in the table, replace "$f(z) = e^{1/z^2}$" by "$f(z) = e^{-1/z^2}$".

Page 673, in the Definition A.60 (Meromorphic function), "$\mathbb{C}$" must be obviously understood as "$\widehat{\mathbb{C}}$". That is, $\widehat{\mathbb{C}} = \mathbb{C} \cup \{\infty\}$.

Page 657, in line 3 replace "*and is noted* $\mathcal{L}^p[a,b]$." and add:
$\mathcal{L}^p[a,b]$ is a vector space. It is also possible to define the function with positive real values: $\|f\|_p := (\int_a^b |f(t)|^p\, dt)^{\frac{1}{p}}$; this function is not a norm since $\|f\|_p = 0$ for any null function f almost everywhere, and so not necessarily zero everywhere. Let F be the subset of $\mathcal{L}^p[a,b]$ that consists of null functions almost everywhere. F is a *vector subspace.*
Theorem.A.9. The quotient space $L^p[a,b] := \mathcal{L}^p[a,b]/F$ is a Banach space if $p \in \mathbb{R}_+^* \setminus]0,1[$.