Pattern Formation: an introduction to methods

This list of typos and errata was last updated on 8th February 2021. Please email me (r.b.hoyle@soton.ac.uk) if you spot any others!

Typos and other errata

p.12, second line after Eq. (1.34): "perturbation" not "peerturbation"

p.16, line 3: "Yoshizawa" not "Yoslizawa"

p.17, line 5: "can't be found analytically" should read "can't be written in a simple closed form".

p.18, penultimate line: "have negative real part" not "are negative"

p.35, Equation 2.34: $C\boldsymbol{y}$ on the far righthand side should be $C\boldsymbol{z}$.

p.42, caption of Fig. 2.9: add "in the case $a > 0$" after "transcritical bifurcation".

p.42, below Equation 2.66: should read "...in the regions $\mu < -2\sqrt{\epsilon\nu_1 a}$ and $\mu > 2\sqrt{\epsilon\nu_1 a}$, ..." not "$x < -2\sqrt{\epsilon\nu_1 a}$ and $x > 2\sqrt{\epsilon\nu_1 a}$, ..."

p.53, line 3 of Example 3.3: insert "invertible" after "real".

p.58, Equation 3.19: $\gamma \notin H$ not $\gamma \neq H$.

p.62, first line of Example 3.13: Δ not Γ'.

p.71, line above Eq. (3.82): "$e^{i\theta}$ for some $\theta \in [0, 2\pi)$" not "± 1 or $\pm i$". Also Eq. (3.82) reads more naturally right to left!

p.76, line 4 of Example 3.27: $M^n(\Gamma)_{ij}$ not $M^a(\Gamma)_{ij}$

p.84, question 3.9: $\mathbb{R}^2$ not $\mathbb{R}_2$

p.97, line 7: Fix(Σ) not Fix(Γ)

p.112, Tables 4.2 and 4.3: the labels R_2 and R_3 have been transposed compared to their definitions in Table 4.1.

p.116, line 1: "subspaces" not "subspace"

p.122, Table 4.4: the isotropy subgroup for standing waves should be written as $\mathbb{Z}_2 \times \mathbb{Z}_2^c$ not $\mathbb{Z}_2 \oplus \mathbb{Z}_2^c$ according to the convention used in the book.

p.126, sixth line from the bottom: by "transverse" here I mean perpendicular (and nothing more technical than that).

p.142, line after Eq. (5.16): "to equation (5.11)" not "to to equation (5.11)"

p.142, line after Eq. (5.19): there should be a subscript 1 on the ξ in the definition of z_1.

p.149, Table 5.2, column 1, lines 4 and 5: "Up-hexagons" and "Down-hexagons" should be in italics.

pp.188 and 189, wherever it appears: $m_{\rm v}$ not m_ν

p.196, Eqs. (6.84) and (6.88): there should not be bar above the A in the second term on the righthand side (since A is real).

p.207: the aspect ratio of Figure 6.18 should be $1:\sqrt{3}$ so that the hidden hexagonal symmetry is correct.

p.241, Eq. (7.120): the initial "0=" on the second line is superfluous.

p.248, Eqs. (8.28) and (8.29): the term $-2d\frac{\partial\phi_0}{\partial X}$ should be $-2dR_0\frac{\partial\phi_0}{\partial X}$.

p.249, two lines before Eq. (8.32): "We have already determined..." In fact I only expanded σ_2 to $O(k^2)$ in Eq. (8.12). Oops! The expansion to $O(k^4)$ is really as given in Eq. (8.32), honest!

p.268, line 1: insert a comma after $h(x)$.

p.278, Eq. (8.151): should read $u_z(x,y,z,t) = A\sin\pi z e^{ix} + c.c.$, similarly to Eq. (1.23), in order to satisfy the free slip boundary conditions. The comment below Eq. (8.151) that the mean drift flow arises from long-scale modulations of A only makes sense if the z dependence of u_z is included. Sorry for the confusion!

p.289, last and penultimate lines: "Sivashinsky" not "Sivashinksy"

p.355, line after Eq. (10.94): $\boldsymbol{X}$ not $\mathbf{X}$

p.356, second line from bottom: $V(r)$ not $V_{(r)}$

p.369, second line after Eq. (10.157): there should be no comma after x_1.

p.373, Eq. (10.181): there should be a comma between $\Delta(r,t)$ and the final t in the large brackets.

p.405, two lines above Eq. (11.148): after "where" insert "$\widetilde{\Theta}$, with" and then insert a comma after "$\ll 1$".

p.413, reference to Morris et al: missing first initial for E. Bodenschatz.