Errata et corrigenda

ANALYTIC COMBINATORICS

by P. Flajolet and R. Sedgewick

(Cambridge University Press, ISBN-13: 9780521898065)

Relative to the edition of January 2009,
of which **a free electronic version** is available at
`http://algo.inria.fr/flajolet/books/`
June 6, 2010

Cuiusvis hominis est errare,
nullius nisi insipientis in errore perseverare.
— Marcus Tullius Cicero (*Oratio Philippica Duodecima*).

Thanks to all those who send corrections or detect typos! This will prove highly valuable in preparing the next edition/printing.

P. 1, last display. Eliminate the spurious "`,␣`" before the period in the equation giving "31 !". — Manuel Kauers 16/09/2009

P. 10, figure caption. "Right: a binary" becomes "Right: A binary". (Unify capitalization in such figure captions.) — Manuel Kauers 16/09/2009

P. 16, line 9. Read as "Part B of this book, *Complex Asymptotics*." (I.e., insert comma). — Manuel Kauers 16/09/2009

P. 18, footnote. Read: "a reference such as".

P. 25, line 2. Get rid of overfull hbox at the end of the line. — Manuel Kauers 16/09/2009

P. 31, last paragraph,"kown" becomes "known". — Ayla Gafni 24/07/2009

P. 35, two lines after Eq. (30): "great depth" replaces "geat depth" — Christopher Hanusa 12/08/2009

P. 39, 3rd line of the table in Figute I.6. "5244589437" becomes "52445 89437". (I.e., insert "`\,`" in source file to separate the 10 digits into two blocks of five digits each.) — Manuel Kauers 16/09/2009

P. 42, line -5. Change "of daisy-artichoke-rabbit fame In particular" to "of daisy-artichoke-rabbit fame. In particular". (I.e., insert period.) — Manuel Kauers 16/09/2009

P. 62, line -6. Read as "over an r letter alphabet". — Manuel Kauers 16/09/2009

Manuel Kauers
16/09/2009

P. 66, line -15. Overfull hbox at the end of the line.

Manuel Kauers
16/09/2009

P. 66, line -2. It is perhaps clearer to read as "the characteristc function is".

Manuel Kauers
16/09/2009

P. 67, line -9. Insert a long space (`\qquad`) after the symbol "$\Longrightarrow$".

Christopher Hanusa
12/08/2009

P. 77, Eq. (80). The figure could be cleaned.

Robin Chapman
30/07/2009

P. 81, three lines below Equation (85). The equation for $\mathcal{H}$ should be "$\mathcal{H} = \mathcal{Z} + \mathcal{Z} \times \mathcal{H} + \mathcal{Z} \times \mathcal{H} \times \mathcal{H}$".

P. 86, Note I.60; line +2, read as "view $\mathcal{A}$"; second display, read as "$\textsc{Useq}(\mathcal{B})$. [I.e., change italics to calligraphic.]

Christopher Hanusa
12/08/2009

P. 89, proof of Theorem I.5, last displayed equation. Delete the extra space between d and the vertical bar in "$d \mid n$".

Manuel Kauers
16/09/2009

P. 95, footnote. "Schútzenberger" becomes "Schützenberger".

Christopher Hanusa
12/08/2009

P. 101. Equation (5) is missing a ')' after $f(\gamma)$. That is, the equation should start as "$\beta \star \gamma = \{ \ (e(\beta, f(\gamma))$".

P. 118, title of Note II.11: "*the Ehrenfest*^{2} *model*". This is *not* a typo, contrary to what several readers think. It is an intended typographical pun, since the work was done jointly by Paul and Tatiana Ehrenfest, husband and wife.

Ayla Gafni
24/07/2009

P. 123, Figure II.8. The estimate for "all cycles $\leq r$" should read $\approx n^{n(1-1/r)}$.

Ayla Gafni
24/07/2009

P. 123, last paragraph, line -3: "permutation" becomes "permutations".

Manuel Kauers
16/09/2009

P. 124, line -13. Overfull hbox at the end of the line.

Ayla Gafni
24/07/2009

P. 125, line -2. Last sentence should begin "Variations of these constructions ..."

P. 139, line -1. Read: "$\partial_z A(z)$" [instead of $A(z)$].

Ayla Gafni
24/07/2009

P. 142, line 12. In case (i), "$\{\epsilon)$" becomes "$\{\epsilon\}$".

Manuel Kauers
16/09/2009

P. 145, line -12. Read as "Since the root of a tree".

Christopher Hanusa
12/08/2009

P. 158, Equation (10). Replace E by $\mathbb{E}$.

Manuel Kauers
16/09/2009

P. 158, line -11. Read the reference as "[205, Ch. X]". (i.e., add period.)

Manuel Kauers
16/09/2009

P. 161, Section III.2.2, line +4. Delete comma after "one has" at the end of the line.

P. 167, line -3. Read as "(e.g., "). (I.e., insert comma and space after "e.g.".) — Manuel Kauers 16/09/2009

P. 169, line-14. Delete the stray comma in the first of the two compositions. — Robin Chapman 30/07/2009

P. 178, Prop III.6: comma missing between SET and CYC. Thus, read as "where $\mathfrak{K}$ is one of SEQ, SET, CYC." — Christopher Hanusa 12/08/2009

P. 186, first displayed equation. In the formula, "$\cdots u_r a_r$" becomes "$\cdots + u_r a_r$". — Manuel Kauers 16/09/2009

P. 187, line 2 (displayed equation). Change "n_r" to "$n_r\,!$". — Manuel Kauers 16/09/2009

P. 188, Note III.24, first display. The last given term should be $f'(g(z))g''(z)$ (but *not* $f'(z)g''(z)$). — Christopher Hanusa 12/08/2009

P. 188, line-2, regarding Faà di Bruno: "canonized" becomes "beatified". — Robin Chapman 30/07/2009
Note: the MacTutor site (wrongly?) implies canonization. The Wikipedia notice is taken (so far?) as the authoritative source.

P. 189, Example III.16. Line 4 should refer to Figure II.15 of Chapter II (but *not* to Figure III.15) — Christopher Hanusa 12/08/2009

P. 200, line-11. Read as $a(u) = zu + zuF(z,1)/(1-zu)$ (instead of $a(u) = zu + F(z,1)/(1-zu)$). — Christopher Hanusa 12/08/2009

P. 206, two lines after Note III.36. There is perhaps a spurious space before "intensely". — Manuel Kauers 16/09/2009

P. 206, last line. Read "inclusion–exclusion" (missing en-dash). — Christopher Hanusa 12/08/2009

P. 207, line 8. Change two occurrences of "E" to "$\mathcal{E}$".

P. 214, Note III.40, line 4. Read as "marked by u. Setting $u \mapsto w-1$ in V then gives $B(z,w)$ as".
Equation (78): replace u by w throughout.

P. 230, line 2. There is perhaps a spurious space before "over". — Manuel Kauers 16/09/2009

P. 233, line -8. Consider changing "γ is one-to-one" to "γ is one-to-one (injective)", as the term "injective" is used in other parts of the book. — Manuel Kauers 16/09/2009

P. 238, line +7. Overfull hbox: consider changing the beginning of the line to ""for an elementary function $E(z)$". — Manuel Kauers 16/09/2009

P. 241. Consider increasing the size of fonts for axis labels. — Manuel Kauers 16/09/2009

P. 243, Section IV.3.2, line +6. Read as $|a_n| >_{\text{i.o.}} (K-\epsilon)^n$. I.e., change "i.o" to "i.o.".

Ayla Gafni
24/07/2009

P. 246. Inequality at the bottom, line-2: $\frac{f_{n+1}}{r^{n+1}}$ becomes $f_{n+1}r$.

Manuel Kauers
16/09/2009

P. 249, line +9. Read as "for all combinatorial classes associated with iterative specifications".

Manuel Kauers
16/09/2009

P. 249, 3 and 4 lines after the diagram relative to $g \circ f$: Consider relacing "Id" by "Id. (Check for consistency in other parts of the book.)

Ayla Gafni
24/07/2009

P. 252, footnote 7: "explict" becomes "explic<u>i</u>t".

Manuel Kauers
16/09/2009

P. 254–255, Example IV.4. Consider replacing "Tr" and Wa by "Tr" and "Wa".

Miklos Bóna
05/12/2009

P. 256, Note IV.26. In the displayed equation, insert a $(-1)^r$ factor after "$C =$".

Manuel Kauers
16/09/2009

P. 262, line -1: "p. 349)" becomes "p. 349.)".

Manuel Kauers
16/09/2009

P. 264, paragraph "Pure periodicities", line +8: "or order" becomes "of order".

Ayla Gafni
24/07/2009

P. 265, line -9, first sentence of last paragraph before I.32: "some open problem" becomes "some open problem<u>s</u>".

Christopher Hanusa
12/08/2009

P. 269, Note IV.36. Replace "$S(r)$" by S_r.

Manuel Kauers
16/09/2009

P. 281, line -8. Overfull hbox.

Christopher Hanusa
12/08/2009

P 285, beginning of second paragraph. Read as "the quotient of two function<u>s</u>".

Ayla Gafni
24/07/2009

P. 286, line -16, third sentence of last paragraph before bibliographic notes: "appreciably more complicated tha<u>t</u> poles" becomes "appreciably more complicated than poles".

Manuel Kauers
16/09/2009

P. 294, line -12. Add comma: "a neighbourhood of σ<u>,</u>".

Clemens Heuberger
17/12/2009

P. 296, line +4 of Example V.1. Read as "and belong to the unlabelled universe ($\mathcal{C}$) or to ...". (I.e., replace the *first* occurrence of "labelled" on that line by "<u>*un*</u>labelled".

Manuel Kauers
16/09/2009

P. 298, line -16. It's preferable to read as "corresponding to $S(z) = z^2 + z^3 + z^5 + \cdots$,". (Indeed, $S(z)$ is defined on the previous page, whereas $G(z)$ is from the more general discussion on p. 294.)

Manuel Kauers
16/09/2009

P. 302, line +2 of Proof. Read as "any dominant pole α". (I.e., delete comma.)

Manuel Kauers
16/09/2009

P. 303, end of long paragraph, middle of page. Insert period after "and so on".

P. 308, footnote 3. Delete spurious comma and replace by a closing parenthesis: "$\{\pi\} = 0.14159\cdots$," becomes "$\{\pi\} = 0.14159\cdots$)." — Ayla Gafni 24/07/2009, Christopher Hanusa 12/08/2009

P. 310, Equation (27): e^{-2y} becomes $e^{-y\log 2}$. — Ayla Gafni 24/07/2009

P. 310, line -3, last displayed equation: error term should be $O\left(\frac{\log^2 n}{\sqrt{n}}\right)$. — Ayla Gafni 24/07/2009

P. 311. First displayed equation should read " $\Phi^*(s) = -\frac{\Gamma(s)}{1-2^s}$". (I.e., insert a minus sign before righthand side.) — Ayla Gafni 24/07/2009

P. 315, Note V.12. In the first display, write $\Phi(w) \equiv \Phi(w;\xi,q)$ [i.e., change comma to semicolon], so as to be in agreement with the second display.

P. 318, Note VI.13. "To each pairs" becomes "To each pair". — Manuel Kauers 16/09/2009

P. 318, Section V.4, line +3. Beginning of line becomes "and Motzkin paths". — Manuel Kauers 16/09/2009

P. 322, proof of Proposition V.3, display. "$\mathcal{H}_{00}$" should be "$\mathcal{H}_{0,0}$" (insert comma; 3 occurrences) — Christopher Hanusa 12/08/2009

P. 322, line -9: overfull hbox ("name**ly**"). — Manuel Kauers 16/09/2009

P. 323, line -4. Mismatched parentheses; read: $\mathcal{L}[z^j Q_l]$. — Christopher Hanusa 12/08/2009

P. 324, Theorem V.5: overfull hbox ("weight**ed**"). — Manuel Kauers 16/09/2009

P. 343 third line of proof: space missing between "parts" and "(i)–(v)".

P. 354, line-12. Read: "each edge exactly once". — Svante Janson 10/11/2008

P. 366, three lines after the figure: "spirit of this book," becomes "spirit of this book.". — Manuel Kauers 16/09/2009

P. 365, line -11. Add a comma after "Temperley [574, p. 66]".

P. 366, third displayed equation. The middle quantity $k(uz)^k + (k+1)(uz)^{k+1} + \cdots$ should be changed to $k(uz) + (k+1)(uz)^2 + \cdots$. The equation becomes — Gadi Aleksandrowicz 22/09/2009

$$\mathcal{L}[u^k] = k(uz) + (k+1)(uz)^2 + \cdots = (k-1)\frac{uz}{1-uz} + \frac{uz}{(1-uz)^2}.$$

(The end result is correctly stated.)

P. 368, line . Add a comma before "with" in "and with 3 of these".

P. 370, line -13. "The initial state (is" becomes "The initial state is". — Manuel Kauers 16/09/2009

P. 371, line -2. *EIS* **A000027**.

Manuel Kauers
16/09/2009

P. 375, line -5. "have have" becomes "have".

Clemens Heuberger
30/03/2009

P. 381, Theorem VI.1, second display. Replace n^{a-1} by $n^{\alpha-1}$.

Christopher Hanusa
12/08/2009

P 383, Equation (20). In the figure, the bold **0** should be a bold **1**.

Christopher Hanusa
12/08/2009

P. 384, displays of Note V.1 and Note V.4. Parentheses should be made bigger in $O\left(\frac{1}{n}\right)$ and in $O\left(\frac{1}{n^2}\right)$, respectively.

Nick Beaton
21/09/2009

P. 384, Note VI.3. There is a missing alternation of sign in the displayed formula: replace $\lambda_{k,\ell}$ by $(-1)^\ell \lambda_{k,\ell}$.

Manuel Kauers
16/09/2009

P. 393, Theorem VI.4. "Let $f(z)$ be function" becomes "Let $f(z)$ be a function".

Ayla Gafni
24/07/2009

P. 394 Eqns (30), (31) and Fig. VI.7 step 2: $z \to 1$ becomes $z \to \zeta$.

Manuel Kauers
16/09/2009

P. 394, Equation (31). Replace $\sigma(z/\zeta))$" by "$\sigma(z/\zeta)$".

Manuel Kauers
16/09/2009

P. 398, lines -4 and -6. "τ_n^*" becomes "$\tau_n^\star$".

Ayla Gafni
24/07/2009

P. 401, line 5, first sentence of VI.6: "its satisfies" becomes "it satisfies".

Christopher Hanusa
12/08/2009

P. 402, (iii). Missing period after "itself SA".

Manuel Kauers
16/09/2009

P. 402, lines +16. Overfull hbox.

Manuel Kauers
16/09/2009

P. 403 , line -15. Read as "locally inverted,". (I.e., replace semicolon by comma in source file.)

Manuel Kauers
16/09/2009

P. 407, Note VI.17. Insert space after $\psi(u^p)$.

Manuel Kauers
16/09/2009

P. 409, lines +1. "$(1-)^r$ becomes "$(-1)^r$".

Manuel Kauers
16/09/2009

P. 412, Section V.2, line +11. Overfull hbox..

Manuel Kauers
16/09/2009

P. 412, Example V.10, second display. Align second occurrence of "$\Longrightarrow$" with fisrt ocurrence on previous line.

Manuel Kauers
16/09/2009

P. 425, line -8: "a product d independent" becomes "a product of d independent"

Steve Finch
Jon Borwein
08/10/2009

P. 426, lines -5, -6. The constant $K \doteq 0.88254240061060637358582 57$ admits a closed form, as first found by Steven Finch and proved by Jon Borwein (private communication, October 2009). The last line of the display giving K should mention this symbolic value

$$K = \frac{4 \log 2}{\pi}.$$

On line -5, add to the parenthetical remark: "The explicit value of K was observed by Steven Finch and proved by Jonathan Borwein, based on an Abelian limit process applied to an elliptic integral."

Manuel Kauers 16/09/2009

P. 432, Example VI.17. Delete spurious commas after v_1 and v_2 in "$\langle u_1, v_{1,}\rangle$" and "$\langle u_2, v_{2,}\rangle$".

P. 443, line +11. Eliminate a spurious parenthesis at beginning of line: "p. 468))" becomes "p. 468)".

Manuel Kauers 16/09/2009

P. 450, line -6. Read as "$\mathbb{F}_p[X]$ to $\mathbb{Z}[X]$". (I.e., replace parentheses by square brackets.)

Manuel Kauers 16/09/2009

P. 454, line -19: "one components" becomes "one component".

Manuel Kauers 16/09/2009

P. 460, line -10: beginning of line should read as "degree 1, $n/8$ of degree 2". (Correct spelling of "degree" and add comma after "1".)

Manuel Kauers 16/09/2009

P. 461, centred table below Eq. (34): uncapitalize "Binary".

Manuel Kauers 16/09/2009

P. 462, line -8: "number of a cyclic" becomes number of cyclic".

Manuel Kauers 16/09/2009

P. 462, line -1: "thanks to generating functions" (i.e., need a plural).

Manuel Kauers 16/09/2009

P. 469 , Lemma VII.2, line 1: read as "be a generating function".

Christopher Hanusa 12/08/2009

P. 473, Example VII.13. first display needs $\mathcal{Z}$ instead of simple Z

Manuel Kauers 16/09/2009

P. 476, line -4: overfull hbox.

Jean-Philippe Conard 9/04/09
Svante Janson 29/05/2009

P. 478, first display below Figure VII.13. It's proven again: alcohol leads to fuzzy thinking. The stated OGF $A(z)$ incorrect; it's shifted, so we have really given $1 + zA(z)$. The correct OGF starts as $A(z) = 1 + z + z^2 + 2z^3 + 4z^4 + \cdots$.

Manuel Kauers 16/09/2009

P. 478, last display: "$35z^9$" becomes "$+ 35z^9$.

Nicolas Broutin xx/05/2009

P. 481, line -5. Read as "$\mathcal{I}^{\bullet\!\!-\!\!\bullet} \cong \textsc{MSet}(\mathcal{H})$".
Line -3, formula (59) is to be changed into $\mathcal{I}^{\bullet} + \mathcal{I}^{\bullet\!\!-\!\!\bullet} \cong \mathcal{I} + (\mathcal{H} \times \mathcal{H})$.

P. 486. Replace "*EIS*: **Axxx**" by "*EIS* **Axxx**" (use macro `\EIS` in source file).

Manuel Kauers 16/09/2009

P. 492, line +3: read as " $\lambda(\rho) = 1$. In effect". (I.e., period replaces comma.)

Manuel Kauers 16/09/2009

P. 495, line -7. Possibly spurious space before "The quantity".

Manuel Kauers 16/09/2009

P. 496, line -7: "$y_{1,}(z)$ becomes "$y_1(z)$".

Manuel Kauers 16/09/2009

P. 498, line +2: read as "$\sum_{n=1}^{\infty} c_n \omega^{jn} z^{n/k}$". (I.e., the exponent of ω should be corrected.)

P. 502, line -6. Delete extra space between "*EIS*" and "**A054727**.

Manuel Kauers 16/09/2009

P. 503, line -7: "$+ \ + 64z^6$" becomes "$+64z^6$".

Manuel Kauers 16/09/2009

P. 510, Eq. (94). The equation should start as "$0 = 1 - z$".

Manuel Kauers 16/09/2009

P. 510, two lines before Proposition VII.9. "pull the BGF" becomes "pull out the BGF".

Manuel Kauers 16/09/2009

P. 511, line +6 of Example VII.21. change 'Polish" to "Polish". (I.e., single quote becomes a double quote.)

Manuel Kauers 16/09/2009

P. 513, line +7. Read: "principal" branch.

Manuel Kauers 16/09/2009

P. 519, Equation (112): "$c_r Y(z)$" becomes $c_r(z)Y(z)$".

Robin Chapman 30/07/2009

P. 523, caption to Figure VII.21. Since we tried to write the book in English, rather than American, "center" should become "centre".

Manuel Kauers 16/09/2009

P. 524, Equation (123): "$\frac{du}{1-u)}$" becomes "$\frac{du}{1-u}$".

Manuel Kauers 16/09/2009

P. 525, one line before Propositio VII.12: "Summarizing ," becomes "Summarizing,".

Manuel Kauers 16/09/2009

P. 526, Note VII.21, line 9: check for the style of the closing parenthesis in "satisfies (E)".

Manuel Kauers 16/09/2009

P. 528, three lines before Proposition VII.13: delete spurious comma in "Singularity analysis,".

Ayla Gafni 24/07/2009

P. 543, line -17 (third paragraph): "$|f(z_0)(1 - \lambda r)$" becomes "$|f(z_0)|(1 - \lambda r)$".

Ayla Gafni 24/07/2009

P. 548, line+13 (beginning of second paragraph after theorem VII.2): "does no fix" becomes "does not fix".

Manuel Kauers 16/09/2009

P. 553, TheoremVII.3, Item (ii): read as "a central approximation holds".

Manuel Kauers 16/09/2009

P. 560, line +8: "$f'(r) = 0$" becomes "$f'(r) = 0$,". (I.e., add comma.)

Manuel Kauers 16/09/2009

P. 562, line +4: "explicit rephrases," becomes "explicit, rephrases". (I.e., shift comma.)

Miklos Bóna 02/12/2009

P. 563, line +3 (first display). Erase the two symbols "$e \cdot$" immediately following

the equal sign.

P. 563, Equation (44). Read as "$O\left(\exp\left(\sqrt{n}-n^{1/10}\right)\right)$". (I.e., change the style of the first opening parenthesis and add a matching closing parenthesis.) — Manuel Kauers 16/09/2009

P. 564, line -5: read as "In terms of G itself". (delete spurious comma.) — Manuel Kauers 16/09/2009

P. 568, Note VIII.11, line 2. Replace "*fails to be* be" by "fails to be". — Cyril Banderier 18/07/2009

P. 569, line -11: check overfull hbox (rephrase?). — Manuel Kauers 16/09/2009

P. 571, Note VIII.14. *EIS* **A075729**.

P. 572, line -16: check overfull hbox (rephrase?). — Manuel Kauers 16/09/2009

P. 574, line -3: read as "a complete treatment.)". (I.e., interchange period and closing parenthesis.) — Manuel Kauers 16/09/2009

P. 579, line +3: read as "Andrews' ". — Manuel Kauers 16/09/2009

P. 584, line 7. *EIS* **A000985** (delete one extra "**A**" in sequence reference).

P. 598, two lines before Example VIII.14: check overfull hbox (rephrase?). — Manuel Kauers 16/09/2009

P. 598, line -6: delete extra space in "hashing algorithms by means". — Manuel Kauers 16/09/2009

P. 603, Note VIII.48: check overfull hbox (rephrase?). — Manuel Kauers 16/09/2009

P. 603, line -12: delete spurious space at the beginning of line, before "For". — Manuel Kauers 16/09/2009

P. 604, first line after figure caption: read as "$dz = (1-t)e^{-t}\,dt$". (I.e., add dt at the end of first formula.) — Manuel Kauers 16/09/2009

P. 619, line+13. This line, starting "The probability generating function", should end with "2^n" (but *not* with "2^{-n}"). — Christopher Hanusa 12/08/2009

P. 621, Figure IX.5, line +4. Replace $e^{\lambda(1-u)}$ by $e^{\lambda(u-1)}$, as the correct PGF of a Poisson(λ) random variable. — Clemens Heuberger 18/11/2009

P. 621, line +4 after figure caption. Read as "notion of convergence". — Manuel Kauers 16/09/2009

P. 627, Theorem IX.13, first line of statement. Replace "E" by "$\mathbb{E}$". (I.e., use the usual symbol for Expectations.) — Clemens Heuberger 09/12/2009

P. 628, lines 13 and 14 of Example IX.5. Read as: "Choosing now the value $r = \log n$ in the statement of Theorem IX.3 provides". (I.e., delete "value" before "provides" and insert "the value" after "now".)

Manuel Kauers
16/09/2009

P. 632, Example IX.6, line +16. End sentence by a period.

Manuel Kauers
16/09/2009

P. 632, Example IX.6, line -3: "univaraite" becomes "univariate".

Manuel Kauers
16/09/2009

P. 633, Proof of Proposition IX.3. Replace "with g, one of the" by "with g one of the".

Manuel Kauers
16/09/2009

P. 637, 3rd displayed equation from top: replace $\frac{1}{(2-u}$) by $\frac{1}{(2-u)}$.

Manuel Kauers
16/09/2009

P. 642, 2nd line after Note IX. 18: "*zentralle*" becomes "zentrale".

Manuel Kauers
16/09/2009

P. 645, 3rd line after the proof of Proposition IX.5: read as "leads, after normalization".

Clemens Heuberger
09/12/2009

P. 646, line -6, displayed equation. Replace "$\frac{1}{k!}$" by "$\frac{1}{r!}$" at the very beginning.

Clemens Heuberger
17/12/2009

P. 650, line -5, immediately before Proposition IX.6. As the relevant notations are quite far away, earlier definitions should best be recalled before the statement of Proposition IX.6. Thus, to the paragraph preceding the statement, append the sentence (or footnote if it helps page breaks): "In what follows, we make use of our earlier notations (e.g., p. 251 and p. 411); namely for a generating function f with nonnegative coefficients, we let ρ_f represent its radius of convergence and set $\tau_f := f(\rho_f)$, with $\tau_f \leq +\infty$."

Clemens Heuberger
17/12/2009

P. 650, line -2, statement of Proposition IX.6. Replace "with a unique dominant singularity at ρ_g, which is a simple pole" by "with the exception of a simple pole at ρ_g".

Clemens Heuberger
17/12/2009

P. 651, lines 5, -4, at the line break. Replace "$h(z) = \rho$" by $h(z) = \rho_g$". (Improve the write-up?)

Manuel Kauers
16/09/2009

P. 652, Proposition IX.7, 2nd line: delete extra parenthesis in "$\textsc{Seq}(u\mathcal{H}))$".

Cyril Banderier
25/06/2009

P. 652, Proposition IX.7. Variance is $\mathbb{V}(X_n) \sim n\frac{\rho h''(\rho) + h'(\rho) - \rho h'(\rho)^2}{\rho^2 h'(\rho)^3}$.
(The corresponding formula in Theorem V.1, p. 294, is correct.)

Manuel Kauers
16/09/2009

P. 653, line -4: delete spurious coma after "Equation (35)".

Manuel Kauers
16/09/2009

P. 666, Note IX.33, line +4: read as "to build a finite automaton".

Manuel Kauers
16/09/2009

P. 671, line +3. It may be preferable to indicate summation indices: "$\sum$" becomes "$\sum_{n,k}$".

Cyril Banderier
18/07/2009

P. 673, line -2. Replace "*a algebraic function*" by "an algebraic function".

P. 680, 2nd display. Read: $\mathcal{T} = \mathcal{Z}u + \mathcal{Z} \star \textsc{Set}_{\geq 1}(\mathcal{T})$.
(I.e., a $\mathcal{Z}$ is missing before $\textsc{Set}_{\geq 1}$.)

P. 683, end of long paragraph after the proof of Proposition IX.17: terminate the sentence with a period. — Manuel Kauers 16/09/2009

P. 684, indented paragraph tagged "***Linear differential equations***", line +4. Add closing double quotes after "regular" and after "irregular". — Manuel Kauers 16/09/2009

P. 691, last line before Example IX.31: change comma to period at the end of the paragraph. — Manuel Kauers 16/09/2009

P. 696, lines -3 and -5. Replace the two occurrences of "Theorem IX.14" by "Theorem VIII.8". — Cyril Banderier & Pawel Hitczenko 18/07/2009

P. 697, line +8: delete spurious coma before "of the function". — Manuel Kauers 16/09/2009

P. 697, lines 12 and 13. Revert the sign of the inequalities, and read : "$\rho(1) \leq |\rho(u)|$" and "$\rho(1) < |\rho(u)|$".

P. 697, line -4: insert opening brace "{" before $\rho_j\}_{j\in\mathbb{Z}}$. — Manuel Kauers 16/09/2009

P. 697, end of Example IX.34: poor spacing before end-of-example marker (black square). Rephrase? — Manuel Kauers 16/09/2009

P. 697, line -2: replace period by comma before "the other ones". — Manuel Kauers 16/09/2009

P. 701, Equation (91). Delete spurious opening parenthesis before $1 + O(\kappa_n^{-1})$. — Manuel Kauers 16/09/2009

P. 708, footnote 18. It could be added that "The function S is related to functions considered by Mittag-Leffler, Wright, and others [Erdelyi81c, §18.1]." The corresponding bibliographic entry is:
[Erdely81c] Erdélyi, A. *Higher Transcendental Functions* (book), Volume 3, Krieger publishing Company, Malabar, Florida, 1981. — Francesco Mainardi 31/07/2009

P. 712, Proposition IX.24, Case (*ii*). This case needs checking and adjustments. From e-mail message by MN and OG: "*It seems to us that the claim in Proposition IX.24 (ii) is not accurate. We believe that in this case the distribution is not bimodal since cores of constant size have probability 0 as* $n \to \infty$." — Marc Noy & Omer Giménez 07/10/2009

P. 718, quotation from the Bible: delete extra parenthesis at the end of the English translation. — Manuel Kauers 16/09/2009

P. 734, display at line-6. Read: $\mathcal{L}_{i,j}^{(r)} = \mathcal{L}_{i,j}^{(r-1)} + \mathcal{L}_{i,r}^{(r-1)} \textsc{Seq}\{\mathcal{L}_{r,r}^{(r-1)}\}\mathcal{L}_{r,j}^{(r-1)}$.
(I.e., delete spurious "(S)" in the middle of the formula.) — Robert Brignall 6/11/2008

P. 739, line-1. Read as "*If* $P(x), Q(x)$" (thus replace *ff* by *If*). — Christopher Hanusa 12/08/2009

Jean-Philippe Conard
2/06/2010

P. 751, lines 1–2. Read as "the notation $a^{\underline{n}}$ for representing the *rising factorial* $a(a+1)\cdots(a+n-1)$."
Equations (24) and (26): change accordingly $(\cdot)_n$ to $(\cdot)^{\underline{n}}$. (Also check consistency of this notation.)

Paul-Olivier Dehaye
7/9/2009

P. 759, Note B.22. The coefficient in the $O(n^{-1})$ error term needs adjustment. Also, the coefficients g_j need to be specified precisely.

P. 762, Note B.24. The last display should have S_n^r replaced by $S_n^{(r)}$, in accordance with earlier conventions in this Note.

Francesco Mainardi
29/07/2009

P. 774. Equation (4). Middle line should read:

$$\mu^{(2)} = \left.\frac{d^2}{ds^2}\lambda(s)\right|_{s=0} = -\left.\frac{d^2}{dt^2}\phi(t)\right|_{t=0}.$$

(I.e., replace $\dfrac{d}{dt}$ by $\dfrac{d^2}{dt^2}$.)

Nicla Bernasconi
17/02/2010

P. 775, Figure C.1, line +5. Replace $\dfrac{\lambda^k}{k!}$ by $\dfrac{\lambda^k}{k}$, to get the correct form of the probabilities of a logarithmic-series random variable. (The form given on p. 297 is correct.)

P. 775, Figure C.1, line +6. Replace $e^{\lambda(1-u)}$ by $e^{\lambda(u-1)}$, as the correct PGF of a Poisson(λ) random variable.

References

Cyril Banderier
18/07/2009

P. 785, Ref. [178]. Replace "Ruble" by "Rubel".

Christopher Hanusa
12/08/2009

P. 792, references [377-379]. It would be desirable to have TAOCP vol 2 come before TAOCP vol 3 in the bibliography (hack bibtex?).