

Proposal for *Collected Papers* of Philippe Flajolet

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Dedicated to the memory of Philippe Flajolet.



Introduction

Suggestions about publishing the *Collected Papers* of Philippe Flajolet

It was suggested to begin by considering collected papers of other scholars. I examined a wide variety, including:

- ▶ Donald E. Knuth
- ▶ F. W. J. Olver
- ▶ George E. P. Box
- ▶ Roger Penrose
- ▶ John Tukey
- ▶ George Pólya

Don and Philippe's work are significantly related, and they both published a little more than 200 papers, so these should be helpful comparisons.

MDW is one of Knuth's selected team of 4 who checked every detail of his collections since 2003, before they were published.

Donald E. Knuth

Publisher: CSLI (Stanford University for the Study of Language and Information); Distributed by: University of Chicago Press

8 volumes; each volume preface has roughly:

- 1 a one-page introduction (a dedication)
- 2 three pages explaining the organization of the volumes, i.e., why the chapters are related and how they are ordered
- 3 one page of thank-you's
- 4 three pages of copyrights
- 5 Surprising: No chapter prefaces by other scholars!
- 6 Some chapters have a brief addendum with information available since the paper was published, and with references to work that was unavailable at the original time of publication.



- ① Literate Programming \$32.50
 - ▶ *xvi* + 368 pages; 8 published papers; 3 book excerpts; 1 new example
 - ② Selected Papers on Computer Science \$28.23
 - ▶ *xii* + 276 pages; 16 published papers; 2 unpublished manuscripts
 - ③ Digital Typography \$38.54
 - ▶ *xvi* + 685 pages; 31 published papers; 3 unpublished manuscripts
 - ④ Selected Papers on Analysis of Algorithms \$39.69
 - ▶ *xvi* + 621 pages; 34 published papers
 - ⑤ Selected Papers on Computer Languages \$35.00
 - ▶ *xvi* + 594 pages; 25 published papers
 - ⑥ Selected Papers on Discrete Mathematics \$40.00
 - ▶ *xvi* + 812 pages; 40 published papers; 1 unpublished manuscript
 - ⑦ Selected Papers on Design of Algorithms \$33.10
 - ▶ *xvi* + 453 pages; 28 published papers
 - ⑧ Selected Papers on Fun and Games \$37.64
 - ▶ *xvii* + 741 pages; 31 published papers; 18 unpublished miscellanea, e.g., Christmas cards; songs; contests; games; artwork; etc.
- all 213 published papers; 6 unpublished manuscripts; 3 book excerpts

Selected Papers of F.W.J. Olver, edited by Roderick Wong

Publisher: World Scientific Series in 20th Century Mathematics

- 1 papers published chronologically, in two volumes
- 2 three pages (by Olver) explaining the organization of the volumes, i.e., why the chapters are related and how they are ordered
- 3 one page of thank-you's
- 4 a one-page "personal tribute" by D. S. Jones
- 5 1.5 pages of background by Wong (editor)—Olver and asymptotics
- 6 56 papers altogether (28 per volume)
- 7 1074 pages altogether (split symmetrically, 537 pages each)
- 8 No chapter introductions
- 9 Papers published in their original form
- 10 includes 56 of 71 papers altogether by Olver

Publisher: Wadsworth (now part of Cengage)

2 volumes; organized by “parts” (Volume I: 2 parts; Volume II: 3 parts).
Each volume preface has roughly:

- 1 a one-page introduction by the editor-in-chief
- 2 a picture of Box
- 3 short 1.5 page bibliography of Box’s life and career
- 4 no introduction about the organization of the volumes
- 5 Each of the 5 “parts” has an introduction by a separate subject-expert (4 to 10 pages)
- 6 Papers published in their original form; no per-paper introduction

George E. P. Box (continued)

- ① Volume I: *xiv* + 657 pages altogether
 - ▶ Part 1: Statistical Inference, Robustness, and Modeling Strategy
 - ▶ 268 pages; 16 papers; 4 page introduction by Stigler
 - ▶ Part 2: Experimental Design and Response Surface Methodology
 - ▶ 382 pages; 14 papers; 6 page introduction by Margolin
- ② Volume II: *xiv* + 709 pages altogether
 - ▶ Part 3: Time Series Analysis and Forecasting
 - ▶ 308 pages; 16 papers; 3 page introduction by Granger
 - ▶ Part 4: Distribution Theory, Transformation of Variables, and Nonlinear Estimations
 - ▶ 232 pages; 13 papers; 9 page introduction by Guttman
 - ▶ Part 5: Applications of Statistics
 - ▶ 162 pages; 10 papers; 4 page introduction by Snee
- ③ TOTAL: 69 published papers from 120 written by Box by the time of publication

Publisher: Oxford University Press

6 volumes; organized chronologically. Each volume preface has roughly:

- 1 a two-page preface by Roger Penrose
- 2 a two-page biography
- 3 degrees (including honorary); employment; awards; marriages; children
- 4 list of books and papers
- 5 a different picture of Penrose in each volume
- 6 a different mathematical graphic on the title sheet of each volume
- 7 1-page introduction (per volume) about time period
- 8 No introduction by subject-experts
- 9 Papers published in their original form; no per-paper introduction

Roger Penrose (continued)

- 1 Volume I: 1953–1967 *xxiii* + 846 pages; 32 papers
- 2 Volume II: 1968–1975 *xxiii* + 959 pages; 37 papers
- 3 Volume III: 1976–1980 *xxiii* + 719 pages; 51 papers
- 4 Volume IV: 1981–1989 *xxiii* + 885 pages; 71 papers
- 5 Volume V: 1990–1996 *xxiii* + 875 pages; 62 papers
- 6 Volume VI: 1997–2003 *xxiii* + 803 pages; 53 papers
- 7 TOTAL: 306 published papers

Publisher: Wadsworth (now part of Cengage)

8 volumes; organized by topic. Each volume preface has roughly:

- 1 a four-page preface by the editor-in-chief
- 2 a four-page biography of Tukey
- 3 complete bibliography (chronological)
- 4 roughly six-page forward by Tukey on each subject
- 5 roughly three-page forward by subject-expert on each subject
- 6 roughly half-page introduction on each paper, in some of the volumes (this varies according to subject-expert on each volume)
- 7 has an index by *subject* to the bibliography
- 8 has an index by *coauthors* to the bibliography
- 9 has an index by *journal* to the bibliography

John W. Tukey (continued)

- 1 Volume I: Time Series: 1949–1964; *lxv* + 650 pages (Brillinger)
- 2 Volume II: Time Series: 1965–1984; *lxv* + 652 pages (Brillinger)
- 3 Volume III: Philosophy and Principles of Data Analysis: 1949–1964; *lxviii* + 516 pages (Jones)
- 4 Volume IV: Philosophy and Principles of Data Analysis: 1965–1986; *xvii* + 498 pages (Jones)
- 5 Volume V: Graphics: 1965–1985; *lxiv* + 436 pages (Cleveland)
- 6 Volume VI: More Mathematical: 1938–1984; *lxxii* + 644 p. (Mallows)
- 7 Volume VII: Factorial & ANOVA: 1949–1962: *lxv* + 260 pages (Cox)
- 8 Volume VIII: Multiple Comparisons, 1948-1983: *lxi* + 475 p. (Braun)

Publisher: MIT Press

4 volumes; organized by topic. Each volume preface has roughly:

- 1 picture of Pólya
 - 2 a two to four-page introduction by the editor
 - 3 roughly half-page introduction on each paper
 - 4 has a chronological index by *volume* to the bibliography
- 1 Volume 1: Singularities of Analytic Functions; $xiv + 808$ pages (Boas)
 - 2 Volume 2: Location of Zeros; $x + 444$ pages (Boas)
 - 3 Volume 3: Analysis; $x + 536$ pages (Rota)
 - 4 Volume 4: Probability; Combinatorics; Teaching and Learning in Mathematics; $ix + 642$ pages (Hersch and Rota)

Editorial Summary

- 1 Knuth: published by Knuth himself
- 2 Olver: edited by Roderick Wong
- 3 Box: one “editor in chief” and 5 subject editors: one for each part
- 4 Penrose: published by Penrose himself
- 5 Tukey: one “editor” and subject editors for each volume
- 6 Pólya: separate editors per volume

Proposal: *Collected Papers* of Philippe Flajolet

Publisher: Cambridge University Press; David Tranah (Editorial Contact)

- ▶ \approx 8 volumes; each volume preface has roughly 10–15 pages
- ▶ Both hardcover (libraries) and paperback (affordable for people!)
- ▶ Volumes organized by topic (i.e., common theme within each volume)
- ▶ Papers organized within volume by theme (not chronologically)
- ▶ Papers published in their original form, i.e., photocopy ready
- ▶ At the end of the volume:
 - ▶ Index to papers according to coauthors
 - ▶ Index to papers according to subjects
 - ▶ Index to papers according to journals/books
 - ▶ ****Index to topics*

Proposal: *Collected Papers* of Philippe Flajolet

- 1 A 3–5 page “personal tribute” to Philippe Flajolet
 - ▶ written by Advisory/Steering Committee Members
- 2 A 3–5 page overview of life/career/awards of Philippe Flajolet
 - ▶ written by Advisory/Steering Committee Members
- 3 Introductory 10–15 page overview/survey of volume topic
 - ▶ written by subject editor (specific to volume)
- 4 Each chapter should have a 1/4 to 1/2 page about the paper
 - ▶ written by subject editor (specific to volume)
- 5 Brief addendum to chapters, with relevant information
 - ▶ e.g., references to work unavailable at the original time of publication
 - ▶ written by subject editor (specific to volume)
- 6 Approximately 3 pages explaining the organization in the volume
 - ▶ written by series editor (not volume editor)
- 7 a different mathematical graphic on the title sheet of each volume,
 - ▶ e.g., for trees, Hankel contours, continued fractions, etc.

Proposal: *Collected Papers* of Philippe Flajolet

Proposed Editorial Team:

- ▶ David Tranah (Editorial Contact at Cambridge University Press)
- ▶ Coordinating Editor, for logistical and organizing efforts in all volumes
- ▶ Subject Editors, one (or small team) specific to each volume
- ▶ Advisory/Steering Committee (5 to 6 people)

Introduction by Don Knuth???

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Potential Topics (Subject to Much Feedback and Change)

- 1 Surveys, 459 pages, 25 papers & reviews of books
- 2 Mellin Transform: 399 pages, 14 papers
- 3 Formal Languages and Automatic Analysis: 803 pages, 24 papers
- 4 Trees, 934 pages, 35 papers
- 5 Continued Fractions, 442 pages, 21 papers
- 6 Applications and Information Theory, 417 pages, 19 papers
- 7 Randomly Generated Objects; Approximate and Probabilistic Counting: 389 pages, 18 papers
- 8 Applications of Analytic Combinatorics, 920 pages, 42 papers

(Page count will go down when conference papers are removed.)

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Not included:

- 1 INRIA chapters \rightarrow Analytic Combinatorics book (Mellin is included)
- 2 Question: papers subsumed by other papers?? (probably not)

Already made 200+ corrections/updates to bibliography

Already cross-referenced \approx 101 INRIA reports with the published papers

Already collected all of the papers (missing only \approx 5 papers)

Many thanks to H.K. Hwang for “trading” papers (we each had 95% of them already) and to Bruno Salvy for extensive guidance.

Thank you for your feedback!!