Société de Calcul Mathématique SA Mathematical Modelling Company, Corp. Tools for decision help, since 1995



List of the books edited and sold by

Société de Calcul Mathématique SA

Paris - France

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Our collection is called "Real Life Mathematics", ISSN 1767-1175: it is an introduction to the Laws of Nature.

Any engineer has a basic formation about general Laws of Nature: physics, chemistry, magnetism, environment, and so on. But, in all cases, during this formation, the laws were presented in a simplified and deterministic manner: simply a formula, with parameters, the meaning of which should be clear.

But this is never the case in real life. The Laws of Nature always have a probabilistic character, and one cannot repeat any experiment in a way which is completely identical to the previous version. The list of parameters which may have an influence is never known with complete certainty. The data that are used are always imprecise. So, a probabilistic approach is essential, and it will always be required by the Safety Authorities, in all domains.

Here are some examples:

- Mechanical properties of materials and aging resistance;
- Energy consumption;
- Propagation of a pollution, of a disease;
- Solvability of a bank or of an insurance company.

In each case, the Safety Authorities will require a "Proof of Safety" which takes uncertainties into account.

In the academic world, probabilities are usually presented in an axiomatic manner, which makes them very hard to understand, and does not make the connection with the Laws of Nature, which do not care about axiomatic settings.

Our books, conversely, take the probabilities from the very beginning and construct them in a progressive manner, using examples from our own experience. The reader will find a very pedagogical presentation, well suited for the Laws of Nature, and for the answers that Safety Authorities may expect.

1. Scientific books

[IEPE] Bernard Beauzamy: Introduction à l'étude des Probabilités Expérimentales (Introduction to the study of experimental probabilities, in French). SCM SA,

ISBN 979-10-95773-02-3, ISSN 1767-1175. Hard cover, 192 pages. January 2023. Price including taxes 50 Euros.

https://www.scmsa.eu/livres/SCM_IEPE_order.htm (can be bought online)

[SRW] Bernard Beauzamy: Simple Random Walks in the Plane, in English, SCM SA. ISBN: 979-10-95773-01-6, ISSN: 1767-1175. hard cover, 208 pages, February 2020. Price including taxes 50 Euros.

https://www.scmsa.eu/livres/SCM_SRW_order.htm (can be bought online)

[GRE] Bernard Beauzamy: Méthodes probabilistes pour la gestion des risques extrêmes (Probabilistic Methods for Extreme Risks), in French. SCM SA. ISBN: 978-2-9521458-9-3, ISSN: 1767-1175. hard cover, 208 pages, June 2015. Price including taxes 50 Euros.

https://www.scmsa.eu/livres/SCM GRE order.htm (can be bought online)

[PIT] Olga Zeydina and Bernard Beauzamy: Probabilistic Information Transfer (in English), SCM SA. ISBN: 978-2-9521458-6-2, ISSN: 1767-1175, hard cover, 208 pages, May 2013. Price including taxes 50 Euros.

https://scmsa.eu/livres/SCM PIT order.htm (can be bought online)

Readers' comments: https://scmsa.eu/livres/PIT_readers_comments.pdf

Please read the interview in "Education Views", by Michael F. Shaughnessy, May 31, 2017: http://www.educationviews.org/olga-zeydina-bernard-beauzamy-probabilistic-information-transfer/

[AMW] Bernard Beauzamy: Archimedes' Modern Works (in English), SCM SA, ISBN 978-2-9521458-7-9, ISSN 1767-1175, hard cover, 224 pages. August 2012. Price including taxes 50 Euros.

https://scmsa.eu/livres/SCM_AMW_order.htm (can be bought online)

Readers' comments: https://scmsa.eu/livres/AMW Readers comments.pdf

[NMP] Bernard Beauzamy: Nouvelles Méthodes Probabilistes pour l'évaluation des risques (in French). SCM SA, ISBN 978-2-9521458-4-8. ISSN 1767-1175, 272 pages. April 2010. Price including taxes 50 Euros.

https://scmsa.eu/livres/SCM_NMP_order.htm (can be bought online)

[RDM] Bernard Beauzamy and Olga Zeydina: Méthodes probabilistes pour la reconstruction de données manquantes (in French). SCM SA, ISBN 2-9521458-2-2, ISSN 1767-1175, 265 pages. April 2007. Price including taxes 50 Euros.

https://scmsa.eu/livres/SCM_RDM_order.pdf

[MPPR2] Bernard Beauzamy : Méthodes Probabilistes pour l'étude des phénomènes réels (in French). SCM SA, ISBN 2-9521458-0-6. ISSN 1767-1175, 369 pages. Second Edition, June 2016. Price including taxes 50 Euros.

https://scmsa.eu/livres/SCM_MPPR_order.htm (can be bought online)

Combined Orders:

One may buy at the same time MPPR2, NMP, GRE: 120 Euros TTC, please see: https://scmsa.eu/livres/SCM_MPPR_NMP_GRE.order.htm (can be bought online) One may buy at the same time MPPR2, RDM, PIT: 120 Euros TTC, please see: https://scmsa.eu/livres/SCM_MPPR_RDM_PIT_order.htm (can be bought online)

2. Other books

[LLTT] The book "Lettres de la SCM", no 1 à 50, followed by "un théorème d'Archimède et ses conséquences" (in French). ISBN 978-2-9521458-5-5 ISSN 1767-1175, 336 pages. November 2010. Price including taxes 20 Euros.

https://scmsa.eu/livres/SCM_LLTT_order.pdf

[GRE] Bernard Beauzamy: "Comment décider et gérer un programme de recherche scientifique? Manuel pratique à l'usage des entreprises" (in French). SCM SA, ISBN 2-9521458-1-4, ISSN 1767-1175, 128 pages, format 15,3 x 24 cm. March 2005. Price including taxes 50 Euros. https://scmsa.eu/livres/SCM MGR order.htm

All these books are available, and shipping is included in the price.

If you wish to order these books, please indicate the ones you want on this list, and fax it to +33 1 42 89 10 69 (out of France) or 01 42 89 10 69 (inside France), or send it by email to: contact@scmsa.com. Please give your address; we will send you the bill at the same time as the books. You may also use your own order forms.

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3. Out of print books

Bernard Beauzamy: Introduction to Banach Spaces and their Geometry (in English). North Holland, Collection "Notas de Matematica", vol. 68. First edition: 1982, second edition: 1985. Out of print.

Bernard Beauzamy: Introduction to Operator Theory and Invariant Subspaces (in English). North Holland, Mathematics Library, 1988. Out of print.

These two books were initially published by North Holland, and they are now out of print. According to WorldCat Identities (http://www.worldcat.org/identities/lccn-n78-47107), these books were bought by more than 400 libraries worldwide and they were widely used by students and researchers, so, after more than 20 years, the existing copies are probably in very poor condition.

The rights of these books have been reverted to us, and we might consider reprinting them, if there is enough interest. Please contact us.