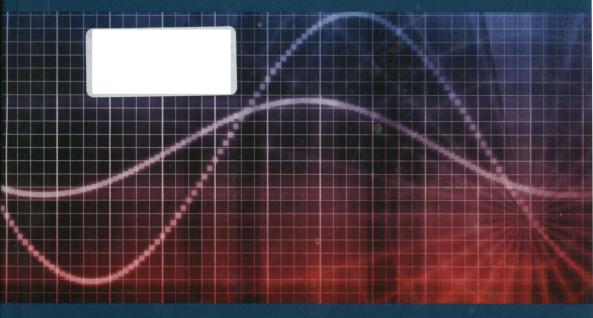
MATHEMATICS AND STATISTICS SERIES



Statistical Models and Methods for Reliability and Survival Analysis

Edited by
Vincent Couallier, Léo Gerville-Réache
Catherine Huber-Carol, Nikolaos Limnios
and Mounir Mesbah



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First published 2014 in Great Britain and the United States by ISTE Ltd and John Wiley & Sons, Inc.

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ISTE Ltd 27-37 St George's Road London SW19 4EU UK

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Library of Congress Control Number: 2013951426

British Library Cataloguing-in-Publication Data A CIP record for this book is available from the British Library ISBN: 978-1-84821-619-8



Printed and bound in Great Britain by CPI Group (UK) Ltd., Croydon, Surrey CR0 4YY

Statistical Models and Methods for Reliability and Survival Analysis

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Preface

Statistical Models and Methods for Reliability and Survival Analysis is a volume of contributions by specialists in statistical theory and their applications that provide up-to-date developments in methods used in survival analysis, statistical goodness of fit, stochastic processes for system reliability among others. Many of them are related to the work of Professor M. Nikulin in statistics which has spanned 30 years. The contributors accepted this challenging project to gather various contributions with a wide range of techniques and results, all of them on the topics of the past S2MRSA conference, 4–6th July 2012, dedicated to M. Nikulin for his 20th anniversary as a professor in the Bordeaux Segalen University (http://www.sm.u-bordeaux2.fr/Stat.Bordeaux.2012). The book is intended for researchers interested in statistical methodology and models useful in survival analysis, system reliability and statistical testing for censored and non-censored data.

Vincent COUALLIER
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Nikolaos LIMNIOS
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October 2013

Biography of Mikhail Stepanovitch Nikouline

From his native city of St. Petersburg, whose name was Leningrad when he was born there on April 29, 1944, Mikhail Stepanovitch Nikulin (Nikouline by French passport) visited many foreign countries due to his interest in several different domains in his favorite disciplines: mathematics and statistics. It was Professor Login N. Bolshev who allowed him to be aware of his talent in mathematics and directed his thesis in the field of "Probability Theory and Mathematical Statistics".

He obtained his Master's degree in mathematics from the State University in St. Petersburg in 1966. In the meanwhile, he had met Valia, a young lady who had many admirers, and he was proud and happy to be the one she chose to be her husband. They married in early 1963 when they were both under 20. Valia was a scientist like her husband and they had a daughter named Hélène at the end of the same year.

Then they decided to learn French intensively in order to go to Brazzaville, capital of the "République Populaire du Congo", where they spent three years. There, both were professors of mathematics in the *Collège d'Enseignement Général* from 1966 to 1969. Just after leaving Congo, their second child Alexis was born; both children were very promising. Then they went back to their native country. There, M.S. Nikouline became a PhD student at the Steklov Mathematical Institute in Moscow, Academy of Science of Russia, while Valia was doing research in mathematics at the Department of Applied Mathematics at the State University in St. Petersburg. Under the supervision of Professor L.N. Bolshev, for whom Nikouline always had a great admiration for both his mathematical skill and his personal human qualities, and whose early death at the age of 56 saddened Nikouline greatly, he obtained his PhD thesis entitled "A generalization of chi square tests".

Chapter written by Vincent COUALLIER, Léo GERVILLE-RÉACHE, Catherine HUBER-CAROL, Nikolaos LIMNIOS and Mounir MESBAH.

From 1974 to 2006, he was a member of the famous Ildar Ibragimov's Laboratory of Statistical Methods at the Mathematical Institute of V. Steklov (St. Petersburg).

From 1988 to 1992, M.S. Nikouline was a docent in the Department of Statistics and Probability at the State University in St. Petersburg. In 1992, he was hired as an Associate Professor at the University Victor Segalen-Bordeaux 2, France, where he spent his career serving in various positions: Professor in 1996, Full Professor in 2006 and Distinguished Professor in 2008 until 2012 when he became Emeritus. During the same time, from 1996 to 2001, he was the head of the Department "SCIMS- Science et Modélisation", and, from 1999 to 2006, he was the head of the Laboratory "Equipe d'Accueil 2961: Mathematical Statistics and its Applications".

He published a large number of papers (more than 250), alone for most of them, or jointly, with several colleagues and friends from the USSR, Europe and Canada, such as V. Solev, V. Bagdonavicius, V.G. Voinov, N.N. Lyashenko, K. Dhzapridze, P. Greenwood, L. Gerville-Réache, J. Kruopis and many others.

His first field of interest, following the theme of his PhD thesis, was goodness-of-fit tests and best unbiased estimators for parametric models. Between 1973 and 1992, he published more than 30 papers on this subject.

From 1993 to 2013, his subjects of interest became more diversified. We can see from the references of Nikulin's papers that although he was interested in parametric models, goodness of fit for them and unbiased estimators, he also tackled semi-parametric and non-parametric models that are more general. In particular, he was interested in human survival data analysis and he was one of the few people who made the link with reliability whose traditional field is industry that seemed for a long time to be very much apart from the medical field. From a mathematical point of view, many advances in any of these two domains could be provided by the other domain. With this perspective in mind, M.S. Nikouline organized with three French colleagues M. Mesbah of the University of Vannes (Britanny) and then University of Paris VI, N. Limnios of the University of Technology of Compiègne and C. Huber-Carol of the University of Paris Descartes, a European Seminar devoted to the "Survival Analysis and Reliability Theory".

During his career in Bordeaux, Nikouline has directed 11 PhD theses and most of his students have obtained good positions either in universities or in industry.

Moreover, Nikouline was the author and editor of a number of volumes on mathematical statistics. He has also written several articles for the *Encyclopaedia* and was part of several editorial boards and scientific societies such as the International Statistical Institute (ISI) and the Mathematical Society of St. Petersburg. Throughout his long career, he has met a large number of colleagues and as he is a friendly and generous person, many of them became his friends and were always very faithful to him.



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