

General Preface

This textbook is the first of series whose ambition is to cover broad part of Probability Theory and Statistics. These textbooks are intended to help learners and readers, of all levels, to train themselves.

As well, they may constitute helpful documents for professors and teachers for both courses and exercises. For more ambitious people, they are only starting points towards more advanced and personalized books. So, these textbooks are kindly put at the disposal of professors and learners.

Our textbooks are classified into categories.

A series of introductory books for beginners. Books of this series are usually accessible to student of first year in universities. They do not require advanced mathematics. Books on elementary probability theory and descriptive statistics are to be put in that category. Books of that kind are usually introductions to more advanced and mathematical versions of the same theory. The first prepare the applications of the second.

A series of books oriented to applications. Students or researchers in very related disciplines such as Health studies, Hydrology, Finance, Economics, etc. may be in need of Probability Theory or Statistics. They are not interested by these disciplines by themselves. Rather, the need to apply their findings as tools to solve their specific problems. So adapted books on Probability Theory and Statistics may be composed of applications in such fields. A perfect example concerns the need of mathematical statistics for economists who do not necessarily have a good background in Measure Theory.

A series of specialized books on Probability theory and Statistics of high level. This series begin with a book on Measure Theory, its counterpart of probability theory, and an introductory book on topology. On that basis, we will have, as much as possible, a coherent presentation of