

The series of “advanced courses”, which was interrupted in the previous volume, is taken up again this year: this thirty-sixth volume proposes a long course on logarithmic Sobolev inequalities, by A. Guionnet and B. Zegarlinski, and two shorter presentations of random matrices: a course, given by L. Pastur and written up by A. Lejay, on the spectral properties of large random matrices, and a survey, by N. O’Connell, of the links between random matrices and processes in continuous time (non-colliding motions, queues).

The rest of the volume proposes as usual a wide variety of themes, where the reader can choose à la carte among Sobolev and log-Sobolev inequalities, stochastic calculus and stochastic differential equations, stochastic differential geometry, filtrations, applications of processes to finance or to systems of conservation laws, non-commutative probability.

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