chapters of the book carry us through that time at Cornell. We hear of his colleagues, of travels, and adventures, and achievements, of his work with the Radiation Laboratory at MIT, and through all of this of his never-ending struggle with mathematics. His publications, only modestly referred to, went on clarifying fundamental concepts of probability theory, extending them to number theory, opening new approaches in theoretical physics.

This is not a book on mathematics, but a life story of a mathematician. There are few places devoted entirely to mathematics, or where even some formulas are displayed. One is in Chapter 3, "The Search for the Meaning of Independence," that in a near-popular manner discusses some work initiated jointly with Steinhaus and then continues to show how justified Henri Poincaré was in saying that the normal probability law is considered "*by mathematicians to be a fact of observations and by observers a theorem of mathematics.*" There is just one formula displayed in an amusing discussion of Ehrenfest's "dog-flea" model, and there are some isolated graphs and formulas scattered elsewhere.

After Cornell came a first exhilarating and later on disappointing affiliation with Rockefeller University (1961–1981). The last five years of his life Kac spent at the University of Southern California.

The charm of *Enigmas of chance* cannot be even hinted at by surveying its contents. There is in it the spirit of a warm human being possessed by driving curiosity, by an urge to understand and clarify. There is an account of going through a stormy period in history, with personal tragedies and times of happiness. And there is the picture of a mathematician who, instead of clinging to mathematics as an abstract game, treated it as a bridge to reality; a mathematician who, as quoted by Gian-Carlo Rota, warned that "*axioms will change with the whims of time, but an application is forever.*" To Kac the problem often was the reason for the theory; he admitted that "*almost everything new in mathematics I learned after getting my doctoral degree has been by being forced to learn it in trying to solve a problem.*"

In the Introduction to his book, Kac expressed the hope to be able to impart to the reader some feeling for the thrill that comes with getting a new idea, as well as for the frustrations and disappointments in the life of a scientist. He did it with charm and grace. He also succeeded in carrying out his other wish: the book gives a moving account of a rich life, and the way it was shaped by family, teachers, collaborators, history, and last but not least, by "*that powerful but capricious lady Chance.*"

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Derivations, dissipations and group actions on C-algebras*, by Ola Bratteli, Lecture Notes in Mathematics, vol. 1229, Springer-Verlag, Berlin, Heidelberg, New York, London, Paris, Tokyo, 1986, vi + 277 pp., $23.60. ISBN 0-387-17199-1

The study of derivations is one of the early disciplines in operator algebra theory with roots back in the beginnings of the subject (see, e.g., [**13**]).