

Chung, Kai Lai

Reminiscences of one of Doeblin's papers. (English) [Zbl 0788.60081](#)

Cohn, Harry (ed.), Doeblin and modern probability. Proceedings of the Doeblin conference '50 years after Doeblin: development in the theory of Markov chains, Markov processes, and sums of random variables' held November 2-7, 1991 at the University of Tübingen's Heinrich Fabri Institut, Blaubeuren, Germany. Providence, RI: American Mathematical Society. *Contemp. Math.* 149, 65-71 (1993).

W. Doeblin's paper commented by the author is "Sur deux problèmes de M. Kolmogoroff concernant les chaînes dénombrables" [*Bull. Soc. Math. Fr.* 66, 210-220 (1938; [Zbl 0020.14604](#))]. The author stresses the importance of Doeblin's ideas concerning ratio limit theorems for sums of transition probabilities and the reduction of the problem of the asymptotic behaviour of partial sums associated with a recurrent Markov chain to one for sums of independent and identically distributed random variables.

For the entire collection see [[Zbl 0777.00028](#)].

Reviewer: [M.Iosifescu \(București\)](#)

MSC:

- [60J10](#) Markov chains (discrete-time Markov processes on discrete state spaces)
- [60-03](#) History of probability theory
- [60-02](#) Research exposition (monographs, survey articles) pertaining to probability theory
- [60F05](#) Central limit and other weak theorems

Keywords:

[ratio limit theorems](#); [asymptotic behaviour of partial sums](#)

Biographic references:

[Doeblin, W.](#)