



## Latest Advances in Random Walks Dating Back to One Hundred Years

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### Message from the Guest Editor

Random walks on graphs may be the simplest stochastic process. Thanks to their simplicity, they serve as a model in many areas beyond probability. Among others, they are the fundamental model of diffusion in physics. The first astonishing observation was made by György Pólya in 1921 about the recurrence of the random walk on  $d$ -dimensional lattice. Recent advances have widened the picture to sub- and superdiffusive phenomena, metastability, and stock price movements, again to name only a fraction of the options.

The aim of the present Special Issue is to provide a wide spectrum but at the same time deep insight into recent results with respect to random walk on its own, as well as its essential applications. We seek papers which provide new and striking insight into the nature of random walk or phenomena modelled by random walk. The emphasis is on the interesting phenomenon in the spirit of György Pólya, not on incremental technical advances. Survey papers might be accommodated in the Special Issue, one for each specific broad area such as RWs on graphs, RWs in random environments, RWs in physics, chemistry, biology, economics, etc.





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## Message from the Editor-in-Chief

The journal *Mathematics* publishes high-quality, refereed papers that treat both pure and applied mathematics. The journal highlights articles devoted to the mathematical treatment of questions arising in physics, chemistry, biology, statistics, finance, computer science, engineering and sociology, particularly those that stress analytical/algebraic aspects and novel problems and their solutions. One of the missions of the journal is to serve mathematicians and scientists through the prompt publication of significant advances in any branch of science and technology, and to provide a forum for the discussion of new scientific developments.

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