

**2021 STEEL PRIZE FOR MATHEMATICAL EXPOSITION
CITATION FOR
NOGA ALON AND JOEL SPENCER**

The Steele Prize for Mathematical Exposition is awarded to Noga Alon and Joel Spencer for book *The Probabilistic Method*, published by Wiley & Sons INC. in 1992.

Now in its fourth edition, *The Probabilistic Method* is an invaluable toolbox for both the beginner and the experienced researcher in discrete probability. It brings together through one unifying perspective a head-spinning variety of results and methods, linked to applications in graph theory, combinatorics, number theory and geometry.

This enduring book has been used around the world. Much-cited by important papers in leading journals, it functions as both onramp and toolbox. The probabilistic method has its roots in the work of Paul Erdos, and this volume brought together a dizzying array of ideas, methods and applications, using them to prove deterministic properties of combinatorial systems and typical properties of random discrete systems.

Applications presented are frequently state-of-the-art bounds, and Alon-Spencer have synthesized their various proofs and at times offer alternative proofs of their own. As is often the case for books that help to seed a field, the material brought together here into a unified fabric was previously unavailable in one place. The style of the book is both crystalline and engaging.