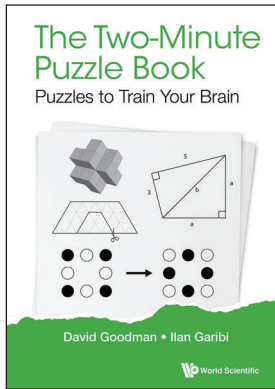




# BOOKSHELF

New and Noteworthy Titles on our Bookshelf  
June/July 2021

World Scientific, 2020, 164 pages. Cover is courtesy of the World Scientific Publishing Company.



**The Two-Minute Puzzle Book:**  
*Puzzles to Train Your Brain*  
by David Goodman and Ilan Garibi

*The Two-Minute Puzzle Book* continues in the tradition of the authors' recent books *The Paper Puzzle Book: All You Need is Paper!* (with Yossi Elran) and *The Tangram Puzzle Book: A New Approach to the Classic Pieces*. The book is divided into nine chapters, each

of which is devoted to a number that features prominently in all of that chapter's problems. For example, the chapter entitled "FOUR Corners of the Earth" contains gems such as "In a  $4 \times 4 \times 4$  cube, how many chess queens can you position, such that no queen threatens another?" and "Arrange eleven matches to create four squares in total. Every edge of a square must be a full match." Each chapter concludes with complete solutions to its problems, although subtle hints are also available in the appendix.

The puzzles were created for the "Two-Minute Puzzles" session of the Israeli version of the "Gathering 4 Gardner" conference, which honors the legacy of Martin Gardner (1914–2010), the legendary mathematical expositor and puzzle connoisseur. Most of the problems have a geometric flavor, and concern the placement of matchsticks, coins, and cubes, or the folding and cutting of paper. *The Two-Minute Puzzle Book* features many dozens of illustrations, often several per page. As the title implies, the problems can be solved quickly (if one has the right perspective!). The solutions are full of "a-ha moments."

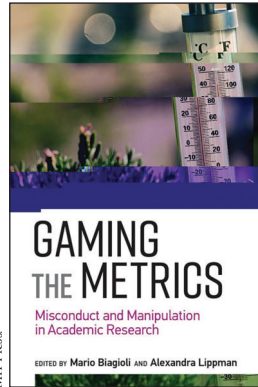
*The Two-Minute Puzzle Book* will delight lovers of mathematical puzzles, particularly those who appreciate puzzles of a geometric sort.

*The Bookshelf* is prepared monthly by Notices Associate Editor Stephan Ramon Garcia.

Appearance of a book in the Notices Bookshelf does not represent an endorsement by the Notices or by the AMS.

Suggestions for the Bookshelf can be sent to [notices-booklist@ams.org](mailto:notices-booklist@ams.org).

MIT Press, 2020, 306 pages. Cover is courtesy of the MIT Press.



**Gaming the Metrics:**  
*Misconduct and Manipulation in Academic Research*  
Edited by Mario Biagioli and Alexandra Lippman

This edited volume contains twenty-one insightful articles, written by a host of scholars from various disciplines, about the metric-driven, "impact"-obsessed approach to the evaluation of academic research. As the economist Charles Goodhart observed

back in 1975, once a metric is used for evaluation, those being evaluated will quickly learn how to "game" the metric, hence reducing, or completely negating, the metric's effectiveness.

While not all of the articles are directly related to mathematics, quite a few are authored by mathematicians or academics in closely allied fields. Most are uncomfortably relevant to the "impact or perish" model that now dominates the assessment of academic productivity. The articles, each of which is erudite and informative, are organized into four main parts: "Beyond and Before Metrics" (five articles), "Collaborative Manipulations" (four articles), "Interventions: Notes from the Field" (eight articles), and "Mimicry for Parody or Profit" (four articles). It is difficult to describe the breadth and variety of these essays here. They touch upon the bizarre story of Ike Ankare (the fictional researcher who briefly became, according to "gamed" metrics, more "impactful" than Albert Einstein), predatory journals and conferences, the widespread publication of computer-generated research papers, and a new breed of administrators tasked with boosting global rankings by any means possible.

This volume, while academic in nature, is highly readable and suitable for any professional mathematician (or administrator) concerned with, or interested in, the increasing ramifications of "impact" and "metrics" in the evaluation of faculty productivity.