the upper faces, but also including a pair of 'Sicherman dice' which have different arrangements of spots but the same distribution of scores. There are also discussions of rolling more than two dice, 'wheel of fortune' models and generating functions for probabilities, and even probability distributions for rolling other Platonic solids, a simple example of the central limit theorem and Markov chains. The final chapter of the book is about Pythagoras' theorem and the many dissection proofs. In fact dissection and tessellation are a major theme in the book, including dissection of regular polygons into equal-area parts, leading to a discussion of geometric series, and tessellation of regular polygons by rhombi.

The book is translated from German, and according to a note on page iv of the front matter this was done by machine using the service DeepL.com. This has resulted in a generally clear, but rather 'wooden'—as opposed to 'lively'—style, with some peculiar sentences which need to be read twice to realise there is a redundant word. There is a useful index and, considering the huge number of coloured illustrations, the price is not exorbitant. A very interesting book with lots of useful material for enrichment at many levels (and why stop at 99?).

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PETER GIBLIN
Department of Mathematical Sciences, The University of Liverpool, Liverpool L69 7ZL
e-mail: *pjgiblin@liv.ac.uk*

Lost in the Math Museum by Colin Adams, pp 209, $35 (paperback), ISBN 978-1-47046-858-3, American Mathematical Society (2022)

Colin Adams is a serious mathematician who, thanks to an excellent sense of humor, also knows when not to take mathematics too seriously. Among other things, he writes the Mathematically Bent column for the Mathematical Intelligencer; engaged (with his colleague Tom Garrity) in a humorous hour-long debate *Derivative vs. Integral: Final Smackdown*, currently available on Youtube at http://www.youtube.com/watch?v=iNtMLGvzFHA; was a co-author of *How to Ace Calculus: A Streetwise Guide* and *How to Ace the Rest of Calculus: A Streetwise Guide*, both of which teach calculus with considerable humor; and also wrote *Zombies and Calculus*, a book that used a zombie attack at a university as a way of telling a number of calculus-related stories.

This book (the main text of which is quite short, about 130 pages long) has some features in common with *Zombies*. Both books, for example, feature a group of people, including mathematicians, fighting for their lives against supernatural opponents while ruminating on mathematics; here, however, instead of fleeing a horde of zombies, the main characters (sixteen year old Kallie, the narrator; her father Tom, a mathematics professor; and her father's friend Maria, another mathematics professor), discover a mathematics museum in the middle of nowhere in Texas while driving home from a conference. The museum quickly proves to have supernatural and sometimes dangerous overtones. They encounter another mathematician who entered the museum two years ago while returning from another conference, they have conversations with long-dead people such as Monty Hall, Bertrand Russell, and Sophie Germain, and they have life-threatening adventures: running from a dangerous hairy ball, trying to avoid being crushed by Hilbert's three-dimensional space-filling curve, and so on. While this is going on, they engage in discussions of the underlying mathematics. These discussions are kept at a fairly low level and require no understanding of mathematics beyond high school level.

Readers who have access to *The Mathematical Intelligencer* and who want to get a sense of what this book is like can refer to pages 23-27 of issue 4 of volume 38 (2016) of that magazine, where the 'math museum' was first introduced. This book is a vastly enlarged version of this article. It contains a (slightly) different cast of characters, but the underlying idea of having mathematical discussions while exploring the museum have not much changed.

The main text of the book is broken up into 23 chapters, most of them just a few pages long, each discussing some interesting topic in mathematics. (One of these, as you may have guessed, is the Hairy Ball theorem from topology; others include Fermat's Last Theorem, the Riemann Hypothesis, the Monty Hall problem, and the RSA cryptosystem.) These chapters take up roughly half the book. The remaining half is a series of appendices, one for each of the chapters, containing additional discussion and a selection of problems, ranging from rather simple to thought-provoking.

Anyone looking for a genuinely exciting science-fiction adventure should likely look elsewhere; the underlying math museum plot serves primarily as a framing device for the various mathematical vignettes. These vignettes, of course, are the heart of the book. They are clearly and interestingly written, and require minimal background in mathematics to understand; high-school mathematics is enough to get through this book. The underlying museum-escape plot of the book, though far from Adams' funniest work, provides a way of linking these vignettes into a coherent whole that secondary and college students should find moderately entertaining as well as informative; they will learn from this book (as Kallie did) that mathematics is not just boring rote equation-solving.

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MARK HUNACEK
Teaching Professor Emeritus,
Iowa State University, Ames
IA 50011 USA
e-mail: *mhunacek@iastate.edu*

Comic sections plus by Des MacHale, pp. 264, £15.67 (paper), ISBN 978-1-4717-6147-8 Logic Press (2022)

All that fans of the first edition, *Comic sections*, [1], need to know is that *Comic sections plus* is an entirely reset and considerably expanded second edition, reflecting Des MacHale's on-going heroic quest to collect and collate humorous mathematical material, much of it in the form of "anecjokes" and quotations. This reviewer, 30 years on from penning [1], finds himself in the position of E. C. Titchmarsh who, "once gave a course lasting two terms, the first from January to April and the second from October to December. He opened the second half of the course by saying, 'Hence …'." (p. 45)

Wryly humorous, each item in the 12 sections of the book says something—often something profound—about the nature of mathematics and mathematicians.

'Deep' items include one involving Littlewood who, "when lecturing on branches of mathematics which frequently involved the factor $\frac{1}{2\pi}$ in front of the integral sign, used to adopt the convention that $2\pi = 1$" (p. 57), and Ulam's enigmatic, "The infinite we do right away. The finite may take a little longer." (p. 239).

Other entries reflect the fragility of learner's understanding.

"$\lim_{8 \to 9} \sqrt{8} = 3$" (p.133)