

Editorial

Dear Readers,

I hope that you are well, wherever you are, and welcome to this issue of *Parabola*!

For the past several years, it has been my pleasure to see a great and growing number of people reading *Parabola*. Likewise, it has been exciting to see the number of article and problem submissions grow in number and in quality. This issue of *Parabola* demonstrates the excellent depth and diversity of these submissions; please feel free to submit your own material too!

The first article in this issue is a fascinating introduction, by Timothy Hume, to the elegant Euler spiral map projection. You might not have heard of it, since it is not designed for maps in the traditional sense; instead, it is a very useful mathematical tool that is used in meteorology.

The second article is an opinion piece, on the overselling of maths. Written by the internationally acclaimed maths expositor Alon Amit, the piece is a joy to read and argues an important point; this is recommended reading.

You might have heard of bridges collapsing due to pedestrians walking in step across them. The third article, by Timothy Kang, addresses the mathematics of this curious and sometimes dramatic phenomenon.

In the last issue of *Parabola*, Randell Hayman explained why certain sums of irrational powers turned out, perhaps surprisingly, to be integers. In the fourth article of the present issue, Xiaoyan Hu explains how to discover nice and simple recursion identities for these sums.

The fifth article presents two questions regarding cyclists in velodromes. These questions are not just interesting mathematical puzzles; they are taken from real life, and the author, Terry Richards, would actually like to know the answers to them. If you happen to be able to find some clear answers, then please feel free to send them to me, and I will gratefully pass them on to Terry.

Please also enjoy the problems, set by Problem Editors David Angell, Arnaud Brothier and Sin Keong Tong. I found these problems to be particularly elegant and enjoyable, and I hope that you will too! :)

Warm regards to you all, and please enjoy this issue of *Parabola*!

Thomas Britz
Editor