

## Editorial

Dear Readers,

welcome to the final 2020 issue of *Parabola*! This has been an unusual year, and fixed and familiar landscapes of life have been given way to new and uncertain terrain. I hope that you have been well through it all!

Speaking of the familiar and the new, it is my great pleasure to introduce you to *Parabola*'s new Problem Editor, Sin Keong Tong, whose problems you can enjoy in this issue. Sin Keong enjoyed *Parabola*'s problems from the very first issue in 1964 and many of his excellent solutions were published in *Parabola* during his high-school years. As a lifelong expert on *Parabola* problems, he is invaluable as Problem Editor, and I am very grateful and excited for him to join our editorial board, working together with Problem Editors Arnaud Brothier and David Angell. Please enjoy their problems!

Please also enjoy the warmly funny comics by Mike Chapman, Max Schneider and Robert Schneider, as well as the interesting articles of this issue. The first, by Randell Hayman, is on a very curious property of the number  $1 + \sqrt{2}$  and similar numbers. In the second article, Jennifer Lew demonstrates how solve integrals by way of sophisticated numerical methods. The third article, by Eric Gao, describes brute force learning for games with uncertain outcomes. In the fourth article, Arqam Patel considers an interesting problem similar in flavour to the Collatz Conjecture.

A fifth article presents a new feature for *Parabola*. In it, Tim Hume briefly summarises and discusses three articles from around the world that might interest you. I enjoyed Tim's summaries as much as the articles and hope that you will too!

It is really great to see so much excellent material be submitted to *Parabola*, and I hope that it might inspire you to submit your own problems, articles, and more.

I dedicate this issue to Bruce Henry who has just retired. One of the kindest and wisest people I've met, Bruce has through the years supported *Parabola* immeasurably. As Chief Editor, Bruce facilitating the transition from the paper version of *Parabola* to the online journal of today, and for that, we owe him great gratitude. I am personally grateful for Bruce's warm support, wise mentoring, and excellent example, as fellow editor, as colleague and as a person. I wish you a very happy retirement, Bruce, and hope that you might have time and inspiration to write more of your excellent articles for *Parabola*!

Warm regards to you all,

Thomas Britz  
Editor