## PREFACE

We are proud to present this collection of research papers by the winners of the 2018 Hang Lung Mathematics Awards (HLMA). The 2018 HLMA marked the eighth occasion of this biennial mathematics research competition for secondary school students in Hong Kong.

Over the past 14 years, HLMA has attracted thousands of young mathematics enthusiasts to rise to the challenge of conducting independent research. Moreover, we are gratified to see that many of our past winners have completed their studies and are now contributing to society across public and private sectors, in academia and other professions.

The research papers of the winners of the 2018 HLMA have once again demonstrated the students' commendable effort, displaying academic excellence, ingenuity, and originality. We are delighted to have witnessed the ignition of students' passion for mathematics, and we are confident that the kindled spirit shall fuel their lifelong intellectual journey.

It is our hope that the experience and exposure gained through the participation of HLMA will continue to inspire the students in their pursuit of academic research. We look forward to seeing more young talents engage in mathematical and other scientific researches, and become pioneers in their respective spheres of studies in the future.

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