

Editorial

It is heartening to learn that the international event MPE (Mathematics of Planet Earth) 2013 has been launched in several countries in the Asia Pacific region, in particular, in Australia, India and Malaysia (see news in this issue). Various activities such as conferences, workshops, seminars, exhibitions, essay and poster competitions have been organised or planned. It is hoped that more countries in the region will take part in this important global event.

As I have mentioned in one of our earlier issues, one way to alleviate the shortage of expository articles for this newsletter is to publish translations of articles that have appeared in various national mathematical societies' newsletters and bulletins. In this issue, there are two articles which have been translated from the original Chinese and Korean versions with minor modifications. In "Lovász's Umbrella" (translated from the Chinese article first published in *Mathmedia* Volume 36 Number 2, June 2012, pp 24–33), Gerard Jennhwa Chang introduces the ingenious method used by Lovász in obtaining the Shannon capacity of a graph based on the orthonormal representation of the graph known as Lovász's umbrella.

"An Elementary Introduction to Categorical Representation Theory" (translated from the Korean article first published in *Korean Mathematical Society Newsletter*, Number 144, 2012, pp 2–6), Seok-Jin Kang gives an introduction to the categorical representation of quantum groups.

Another article featured in this current issue is "Congruent Numbers and Heegner Points" by Shou-Wu Zhang, who presents a brief introduction to the modern version of a problem on congruent numbers given in an Arabic manuscript of the tenth century.

The article "On Relative Computability for Curves" by Minhyong Kim discusses a rational version of a conjecture of Matiyasevich on the relative decidability of the finiteness problem for Diophantine equations with respect to the existence problem.

Sundararaman Ramanan in "M S Narasimhan, The Man and The Mathematician" provides a personal glimpse into the life and mathematical contributions of Narasimhan, in particular, the author's collaboration and interaction with

Narasimhan. In relation to this, this issue also carries a report on a conference on algebraic geometry in honour of Narasimhan's 80th birthday (page 48).

There are two interviews in the April 2013 issue. The interview with Narasimhan touches on his life and work. On the other hand, the short interview with Guo Shuchun discusses the charm and importance of traditional Chinese mathematics.

Last year was the golden jubilee of the Institute of Mathematical Sciences (IMSc) at Chennai, India. A write-up on IMSc and the report of IMSc@50 celebrations are included in this issue.

Once again, readers are encouraged to send me their comments and suggestions for improving the quality of this newsletter. Your feedback is important in making this newsletter serve better the mathematics community in the Asia Pacific region.

Swee Cheng Lim
Editor

Asia Pacific Mathematics Newsletter welcomes contributions on the following items:

- Expository articles on mathematical topics of general interest
- Articles on mathematics education
- Introducing centres of excellence in mathematical sciences
- News of mathematical societies in the Asia Pacific region
- Introducing well-known mathematicians from the Asia Pacific region
- Book reviews
- Conference reports and announcements held in Asia Pacific countries
- Letters from readers on relevant topics and issues
- Other items of interest to the mathematics community