FOREWORD

We had the great pleasure of having Professor Paul Erdős visiting our Institute for three weeks in November 1994. As expected, the visit of this unique mathematician was a source of great excitement to all of us, especially because this was his first visit to São Paulo, and in fact to South America.

To celebrate this event, the meeting *Semana de Combinatória* was held at our Institute on 9–11 November 1994. We had a total of thirteen invited talks at our *Semana*, including two lectures by Professor Erdős. It was our intention to cover a variety of topics in our meeting, having as the central theme the subjects in which Professor Erdős's work has had direct or indirect influence, and in which there are Brazilian mathematicians actively working on today. Thus, we had talks on finite and infinite combinatorics, including applications to topology and analysis, probability theory, theoretical computer science, group theory, and optimisation. We are happy to thank all the speakers and all the participants who were able to attend the meeting.

This number of *Resenhas IME-USP* contains papers presented at our *Semana*.[1] All papers were anonymously refereed. We thank all the contributors and the referees for their collaboration. We especially thank Professor Erdős, who wrote during his stay with us an inspiring paper on some of his favourite problems. It is with this article that we open this number.

The reader will find in Professor Erdős's paper a beautiful picture of his contributions to number theory, combinatorics, and geometry, including the latest problems he has been interested in, although a 'snapshot' would certainly be a much better word: no single paper, however comprehensive, could faithfully portray the depth and impact of his contributions to any single area of mathematics in which he has been working.

The sheer volume of Professor Erdős's work is of couse also well known. One finds his over 1300 papers in a variety of mathematics journals, and many Brazilian readers will perhaps first learn from Professor Erdős paper in this number[2] that his first contribution to a Brazilian journal goes back to 1950, when he published a number theory paper in *Summa Brasiliensis Mathematicæ*, a series born in 1945 and published in cooperation by *Centro Brasileiro de Pesquisas Físicas*, *Academia Brasileira de Ciências*, *Faculdade Nacional de Filosofia* (*Universidade do Brasil*), *Sociedade de Matemática de São Paulo*, and *Faculdade de Filosofia, Ciências e Letras* (*Universidade de São Paulo*).

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[1] Professor Tomasz Łuczak (Poznań, Poland), who is a regular collaborator of Professor Erdős and who has visited our Institute twice recently, has kindly agreed to submit a paper to this number as well.

[2] See §3 in Part I of his paper.

The Brazilian mathematics community has grown since then, and, as one might expect from Professor Erdős, he was keen to meet as many mathematicians as possible during his stay. In this one-month trip to Brazil, he visited and lectured at the University of Campinas, the University of Brasília, the Institute of Pure and Applied Mathematics in Rio de Janeiro, and the Federal University of Rio de Janeiro. We are certain that, besides his lectures, his contagious enthusiasm for mathematics and his devotion to his chosen art were most inspiring to members of our community who were able to see him in this trip.

The editors and contributors to this special issue of *Resenhas IME-USP* warmly dedicate this number to Professor Paul Erdős.

Yoshiharu Kohayakawa
Imre Simon
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