Preface

The present issue of Publications of RIMS is dedicated to Professor Heisuke Hironaka on the occasion of his Kiju^{*}, that is, his 77th birthday. Professor Hironaka was born on April 9, 1931 in Yamaguchi Prefecture. After receiving his Bachelor of Science in 1954 and his Master of Science in 1956 both from Kyoto University, he received his Ph. D. from Harvard University in 1960. After years at Brandeis, Colombia and Harvard Universities, he became a professor of RIMS Kyoto University in 1975. He was Director of RIMS from 1983 to 1985, and has been a Professor Emeritus of Kyoto University since 1991.

Professor Hironaka began his study of algebraic geometry in the graduate school of Kyoto University. He solved "the resolution of singularities", one of the most fundamental problems in mathematics in 1960's, and constructed and developed deep theories in algebraic geometry (see the article by Lê Dũng Tráng and Bernard Teissier in the present issue). He was awarded the Japan Academy Prize and the Fields Medal both in 1970. Among many other honors he received an Order of Cultural Merits from Japanese Government in 1975. Professor Hironaka has also made great efforts to bring up young mathematical scientists and to develop international exchange in mathematical sciences (see the article by Tadao Oda in the present issue).

This issue consists of 16 invited articles, all of which are fully refereed. We are grateful to the authors. We would like to express our deepest gratitude to Professor Hironaka for his great academic and educational achievements on this occasion.

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^{*}喜寿: joyful and long life. The first letter in *sousyo*, a running style, is very similar to the Chinese numeral 七十七, 77.