

Preface

This volume is the Proceedings of the International Conference “Algebraic Geometry in East Asia, III” which was held at the Korea Institute for Advanced Study (KIAS) in Seoul, Korea during November 11 to November 15, 2008. There were about 60 participants who came from 8 countries: Korea, China, Denmark, Germany, Japan, Taiwan, USA and Vietnam, and 21 invited lectures were presented at the conference. It was financially supported by KIAS.

The first conference under the same title was held at the International Institute for Advanced Studies (Kyoto, Japan) in 2001, the second was held at the Conference Hall (Hanoi, Vietnam) in 2005, and this is the third meeting. One of primary goals of the conference has been to provide opportunities to meet and exchange ideas among east Asian mathematical communities of algebraic geometry. Thanks to the active cooperation of all participants, we are quite confident that the goal was successfully achieved this time again. We hope that this conference will continue to have positive impacts on the future collaborations among algebraic geometers in east Asia.

The papers appearing in this volume explore a wide variety of topics that illustrate interactions between algebraic geometry and other branches of mathematics. Some of the topics are: curves, surfaces, Fano varieties, varieties of general type, automorphisms, endomorphisms, bundles, Cremona groups, fundamental group scheme, Mordell–Weil lattices and quantum rings.

The book consists of two parts. The first part consists of survey articles and the second consists of research articles.

During the conference, staffs in KIAS helped us. Without them, the conference would have been less successful than we had hoped for. On behalf of the organizers, we like to express our hearty thanks to all invited speakers for their beautiful talks, and to all participants for their stimulating discussions and warm cooperation.

Seoul, April 2010

JongHae Keum

All papers in this volume have been refereed and are in final form. No version of any of them will be submitted for publication elsewhere.