

Preface

This volume of *Advanced Studies in Pure Mathematics* is the proceedings of the Second MSJ-SI (Mathematical Society of Japan-Seasonal Institute)

“Arrangements of Hyperplanes”

August 1–13, 2009

Hokkaido University, Sapporo, Japan.

The MSJ-SI is a major annual conference series of the Mathematical Society of Japan whose subject is selected by the Scientific Committee of the MSJ.

The subject of the Second MSJ-SI was arrangements of hyperplanes. The conference featured the following eight series of lectures by world’s-leading experts:

Arrangements and Topology: (3 lectures)
by Toshitake Kohno (University of Tokyo, Japan)

Arrangements and Singularities: (3 lectures)
by Kyoji Saito (Institute for the Physics and Mathematics of the Universe, Japan)

Arrangements and Computations: (3 lectures)
by Hal Schenck (University of Illinois, USA)

Arrangements and Combinatorics: (3 lectures)
by Richard Stanley (MIT, USA)

Arrangements and Statistics: (3 lectures)
by Akimichi Takemura (University of Tokyo, Japan)

Arrangements, Hypergeometric Integrals and Physics:
(3 lectures)
by Alexander Varchenko (University of North Carolina at Chapel Hill, USA)

Arrangements and Algebraic Geometry: (3 lectures)
by Masahiko Yoshinaga (Kyoto University, Japan)

Arrangements (Introduction): (2 lectures)
by Sergey Yuzvinsky (University of Oregon, USA).

The first week of the meeting was devoted to these survey lectures. We believe that the carefully-prepared lectures gave the audience an excellent introduction to the theory of arrangements of hyperplanes. In the second week, twenty-four active researchers gave invited talks on the themes related to arrangements of hyperplanes. In addition, nine relatively young mathematicians talked with vigor about their recent results as short communications. Thus we had fifty-six lectures in total which were presented to the 179 participants, sixty-two of whom were from abroad. The overseas participants included three mathematicians from the Korean Mathematical Society and three from the Mathematical Society of Republic of China whom the MSJ invited to promote mathematical activities in the East Asia.

The organizing committee members were Hiroaki Terao (chair, Hokkaido University), Takuro Abe (Kyoto University), Masahiko Yoshinaga (Kyoto University) and Sergey Yuzvinsky (University of Oregon). The conference was made possible by generous financial supports provided by the MSJ, Hokkaido University, the Sapporo International Communication Plaza Foundation and Professor Akimichi Takemura's Grant-in-Aid for Scientific Research. The staff of MSJ, secretaries of the Mathematics Department, especially Ms. Akiko Yamashita, volunteer interpreters, graduate students successfully helped the conference to go on smoothly through the entire period. Ms. Akiko Taniguchi helped us to edit the files for this volume with her expertise on \TeX . We express our gratitude to all of them. Lastly we would like to express our sincere gratitude to the contributors to this volume as well as the referees of the papers.

Editors:

Hiroaki Terao (Hokkaido University)
Sergey Yuzvinsky (University of Oregon)

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.