

# Preface

The articles in this volume<sup>1</sup> are an outgrowth<sup>2</sup> of the Impanga Conference of Algebraic Geometry, held in Będlewo, Poland, in the period July 4.–10., 2010. For information about this event, see:

<http://www.impan.pl/~impanga/school>

Here is a brief summary of the content of the volume.

Classical varieties like: K3 surfaces, Enriques surfaces, Calabi-Yau varieties and Prym varieties together with their moduli are represented in the contributions of Shigeru Mukai, Michał Kapustka and Gavril Farkas. The problems of geometry related to the Minimal Model Program are discussed in the papers of Paolo Cascini and Vladimir Lazić, Mircea Mustața, Clemens Joerger and Stefan Kebekus, and in the contribution of Michał Michałek. Different aspects of toric geometry are represented by the articles of Klaus Altmann et al., and Andreas Hochenegger and Frederik Witt. Miscellaneous computations related to singularities are the subjects of papers of Gergely Bérczi, Sławomir Cynk and Sławomir Rams, and Özer Öztürk and Piotr Pragacz. Various problems on linear systems are approached in the articles by Thomas Bauer et al. and Halszka Tutaj-Gasińska. Some arithmetic problems are addressed in the articles of Kevin Hitchinson and Masha Vlasenko, and Marek Szyjewski. Dave Anderson gives an introduction to equivariant cohomology. Finally, Letterio Gatto and Inna Scherbak discuss Wrońskians in algebraic geometry.

The whole volume is dedicated to the memory of **Oscar Zariski** – the father of modern algebraic geometry. The opening article by Piotr Blass discusses some aspects of his life and work.

This volume completes the Impanga trilogy, whose first two volumes are: “Topics in cohomological studies of algebraic varieties”, and “Algebraic cycles, sheaves, shtukas, and moduli”, edited by Birkhäuser in 2005 and 2008, respectively.

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The Editor