## Surveys in Differential Geometry

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Volume XIII

## Surveys in Differential Geometry

Geometry, Analysis, and Algebraic Geometry: Forty Years of the Journal of Differential Geometry

edited by Huai-Dong Cao and Shing-Tung Yau



Surveys in Differential Geometry, Vol. 13

International Press P.O. Box 43502 Somerville, MA 02143 www.intlpress.com

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Huai-Dong Cao and Shing-Tung Yau, editors

ISBN: 978-1-57146-138-4 Typeset using the LaTeX system. Printed in the USA on acid-free paper.

## Preface

Publication of the Journal of Differential Geometry began in 1967, and for the past 40 years it has flourished, coming to be regarded as the leading journal on the subject.

In 1980, C.-C. Hsiung asked me to be chief editor of the JDG. I was reluctant, for many obstacles presented themselves. However, many great geometers came to the support of the journal. Almost immediately after establishing a new editorial board, we were able to obtain the highly regarded works of Freedman, Donaldson, Schoen, Uhlenbeck, Witten, etc. The editors continue to be deeply grateful for the tremendous support lent by these authors and many others. The quality of the JDG is as strong as ever. (A few years ago, in fact, we found it necessary to increase the journal's size, that we might do justice to the depth and excellence of the submissions received.)

The JDG's 40th anniversary was celebrated at the Seventh Conference on Geometry and Topology, held at Harvard University in May 2008. The outstanding survey papers making up this volume are the outcome of that conference.

Professor C.-C. Hsiung has just passed away. We would like to dedicate this volume to the memory of him. He was the founding father of the journal, and editor-in-chief these past 40 years. His contribution is immeasurable.

> Shing-Tung Yau Harvard University June 2009

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