

## Preface

Each year the *Journal of Differential Geometry* (JDG) sponsors a conference on Geometry and Topology. The conference is held every third year at Harvard University, and other years at Lehigh University.

The current volume includes papers presented by several speakers at both the 2011 conference at Harvard and the 2012 conference at Lehigh. We have articles by Simon Brendle, on the Lagrangian minimal surface equation and related problems; by Sergio Cecotti and Cumrun Vafa, concerning classification of complete  $N = 2$  supersymmetric theories in 4 dimensions; by F. Reese Harvey and H. Blaine Lawson Jr., on existence, uniqueness, and removable singularities for non-linear PDEs in geometry; by János Kollár, concerning links of complex analytic singularities; by Claude LeBrun, on Calabi energies of extremal toric surfaces; by Mu-Tao Wang, concerning mean curvature flows and isotopy problems; and by Steve Zelditch, on eigenfunctions and nodal sets.

We are grateful to the many distinguished geometers and topologists who presented invited talks at these two conferences, especially those who contributed articles to this volume of the *Surveys in Differential Geometry* book series.

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