

PREFACE

This special issue of *Methods and Applications of Analysis* is dedicated to Professor Stanley Osher on the occasion of his seventieth birthday. It consists of 15 papers covering a wide spectrum in both methods and applications of analysis, including imaging science, numerical analysis, optimization, and scientific computing.

Stanley Osher has made pioneering and influential contributions in all the areas covered in this special issue. Most of the papers in this issue are authored by collaborators, friends and students of Osher, and the topics covered are mostly related to his research. In fact, Osher himself co-authored a paper in this special issue.

We can see a sample of the influence of Stanley Osher in such diversified areas of methods and applications of analysis and general applied mathematics through the limited number of papers in this special issue. Most of the papers here cite Osher's work and many use or further develop ideas, frameworks or techniques in his work. Ten years ago, we published a special issue in honor of his sixtieth birthday. We are happy to see that Osher has kept his fast pace of original research over the past ten years, making fundamental contributions not only in his traditional areas of research but also in new and diversified areas including imaging science and optimization. We wish him a happy birthday and we look forward to see more exciting results from his research in the coming years.

Chi-Wang Shu
Brown University