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Radosław Iwankiewicz, Zbigniew Kotulski (Editors)

## STOCHASTIC METHODS IN MECHANICS: STATUS AND CHALLENGES

International Conference, Warsaw, September 28-30 2009



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## PREFACE

The purpose of the Conference is to summarize the recent advances, to discuss the status, the development trends and also to share views on the current and future challenges in the wide subject area of stochastic mechanics and, more generally, in applied stochastics.

The development of stochastic methods in mechanics and of stochastic dynamics in particular, has been achieved over the past four decades owing to the research and collective, persistent efforts of many people. However, with no doubt there can be identified a group of world leaders who made mile stone, or corner stone, contributions to the subject area, having laid out the avenues for pursuing research and having inspired the research of many others. One of those leaders is Professor Kazimierz Sobczyk, who and whose research work are worldwide known. It happens that 2009 is the year of his seventieth birthday. This has presented a very special occasion for convening a conference aimed at taking a broader view on the status and future challenges of the subject area of stochastic mechanics.

The present book contains the extended abstracts of 26 papers to be presented at the conference. The papers cover the range of up-to-date topics in applied stochastics and stochastic mechanics as well as some topics in mechanics of materials. These topics are of relevance to Professor Sobczyk areas of research and his pioneering contributions.

This volume of abstracts is complemented with an essay by Professor Kazimierz Sobczyk presenting his way through stochastic mechanics. We also present a list of publications by Professor Kazimierz Sobczyk.

The editors would like to thank all the authors and the attendees of the Conference for their contributions to this event.

The Editors,

Radosław Iwankiewicz Hamburg University of Technology

**Zbigniew Kotulski** Institute of Fundamental Technological Research of the Polish Academy of Sciences International Conference on Stochastic Methods in Mechanics: Status and Challenges, Warsaw, September 28-30, 2009

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