

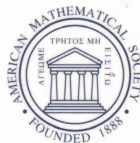
CONTEMPORARY MATHEMATICS

317

Finite and Infinite Dimensional Analysis in Honor of Leonard Gross

AMS Special Session
Analysis on Infinite Dimensional Spaces
January 12–13, 2001
New Orleans, Louisiana

Hui-Hsiung Kuo
Ambar N. Sengupta
Editors



Finite and Infinite
Dimensional Analysis
in Honor of Leonard Gross



At the AMS Special Session honoring Leonard Gross.
New Orleans, January, 2001.

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American Mathematical Society
Providence, Rhode Island

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Preface

This volume brings together papers presented at a special session in honor of Leonard Gross at the AMS annual meeting in New Orleans, January, 2001. The speakers at the session were experts in a variety of fields and included many former Ph.D. students of Gross and some of their mathematical descendants.

The papers in this volume present results from several areas of mathematics. They illustrate applications of powerful ideas, many of which originate in the works of Gross, which permeate these diverse fields. The lectures given at the meeting illustrated the wide and deep impact of the mathematical work of Leonard Gross.

We hope that this volume will be useful to professional researchers and graduate students, providing a perspective on current activity as well as central ideas and techniques in the topics covered.

We are thankful to all the speakers at the meeting. For this volume we are especially grateful to the anonymous referees for their careful work on all the papers which appear here. Thanks to Christine Thivierge at the American Mathematical Society for her patient assistance during the long process of preparing this volume.

Finally, it is a great honor to acknowledge our personal debt to Leonard Gross. Preparing this volume has been a privilege and we offer it as a small token of the esteem in which we hold him.

Hui-Hsiung Kuo and Ambar N. Sengupta

**Invited speakers at the Special Session “Analysis on
Infinite Dimensional Spaces
(in honor of Leonard Gross),”
American Mathematical Society Annual Meeting,
January 12–13, 2001, New Orleans**

1. Luigi Accardi: University of Rome Tor Vergata (Italy)
2. Sergio Albeverio: University of Bonn (Germany)
3. Nobuhiro Asai: RIMS, Kyoto University (Japan)
4. William Beckner*: University of Texas at Austin (USA)
5. Eric Carlen*: Georgia Institute of Technology (USA)
6. Rene Carmona*: Princeton University (USA)
7. Bruce Driver: University of California, San Diego (USA)
8. Victor Goodman: Indiana University (USA)
9. Maria Gordina: University of Connecticut (USA)
10. Leonard Gross*: Cornell University (USA)
11. Brian Hall: University of Notre Dame (USA)
12. Takeyuki Hida: Meijo University (Japan)
13. Masanori Hino: Kyoto University (Japan)
14. Christopher King: Northeastern University (USA)
15. Yuh-Jia Lee: National University of Kaohsiung (Taiwan)
16. Jeffrey Mitchell: Baylor University (USA)
17. Mylan Redfern: University of Southern Mississippi (USA)
18. Michael Röckner: University of Bielefeld (Germany)
19. Stephen Sontz: Centro de Investigación en Matemáticas, A.C. (Mexico)
20. Aurel Stan: University of Rochester (USA)
21. Matthew Stenzel: Ohio State University, Newark (USA)

*Did not contribute to this volume.

Ph.D. students of Leonard Gross (December, 2002)

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Singular integrals on Hilbert space.
2. Piech, Margaret Ann Garrett, (1967):
A fundamental solution of the parabolic equation on Hilbert space.
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Regularity properties of harmonic functions on Hilbert space.
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Integration theory on infinite dimensional manifolds.
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Regularity for the initial-boundary value problem for the heat equation in infinite dimensions.
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The infinitely renormalized field in the scalar field model.
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13. King, Roy Johnson, (1975):
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On the essential self-adjointness of Dirichlet operators on non-linear path space.
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The regularity of solutions to the heat equation over group valued path space.
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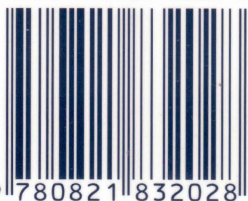
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Papers in this volume present results from several areas of mathematics. They illustrate applications of powerful ideas that originated in Gross's work and permeate diverse fields. Topics include stochastic partial differential equations, white noise analysis, Brownian motion, Segal-Bargmann analysis, heat kernels, and some applications.

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