

Contents

Preface	ix
Chapter 1. Introduction: Diffusive Motion and Where It Leads William G. Faris	1
Chapter 2. Hypercontractivity, Logarithmic Sobolev Inequalities, and Applications: A Survey of Surveys Leonard Gross	45
Chapter 3. Ed Nelson's Work in Quantum Theory Barry Simon	75
Chapter 4. Symanzik, Nelson, and Self-Avoiding Walk David C. Brydges	95
Chapter 5. Stochastic Mechanics: A Look Back and a Look Ahead Eric Carlen	117
Chapter 6. Current Trends in Optimal Transportation: A Tribute to Ed Nelson Cédric Villani	141
Chapter 7. Internal Set Theory and Infinitesimal Random Walks Gregory F. Lawler	157
Chapter 8. Nelson's Work on Logic and Foundations and Other Reflections on the Foundations of Mathematics Samuel R. Buss	183
Chapter 9. Some Musical Groups: Selected Applications of Group Theory in Music Julian Hook	209
Chapter 10. Afterword Edward Nelson	229

Appendix A. Publications by Edward Nelson

233

Index

241