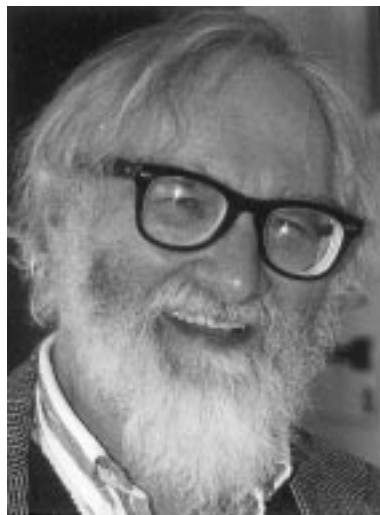# Preface

It is a great pleasure to dedicate this issue of the *Journal of Statistical Physics* to our good friend and esteemed colleague George Stell.

For nearly half a century, George has been a leading figure in the statistical mechanics of liquids. His beautiful technique of "topological reduction" greatly expanded the range of applicability of Mayer-type expansions and enabled him, among many other things, to provide an elegant derivation of the Percus–Yevick equation. He has made many contributions to the theory of critical points in fluid systems, in particular his careful study (with Wu and Larsen) of the charged hard-sphere system, which provided the first strong evidence for a critical point in this system (and at a remarkably low density). He also recognized that the methods of liquid state theory are applicable to the study of random media and made many seminal contributions to this field, including percolation theory. More recently, with Dickman, Hoye and others, he has been developing a new approximation method which reduces the calculation of thermodynamic functions for certain lattice models to the solution of a parabolic partial differential equation, and appears to give excellent accuracy right up to the critical point.

As is evident from the quality of his review articles, he has a wonderful knowledge of the literature in his subject. He has patiently guided many graduate students and postdoctoral associates through the complexities of research to launch them on succesful scientific careers. He instilled a love for research in his younger colleagues that will always remain with them.

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George obtained his Ph.D. in mathematics at the Institute of Mathematical Sciences, New York University, in 1961. He has been at the State University of New York at Stony Brook since 1968, where he is a Leading Professor in the Department of Chemistry. He has received numerous awards and honors recognizing his research achievements, including being an American Physical Society Fellow and Guggenheim Fellow, and receiving the Joel Henry Hildebrand Award in the Theoretical and Experimental Chemistry of liquids, given by the American Chemical Society.

Quite apart from his scientific merits, George's good nature and his prolific sense of humor make him a pleasant and entertaining companion and a good scientific collaborator. One of his own favorite companions is his trombone, on which he is an enthusiastic jazz performer.

The death of his beloved wife Annie in 1998 was a blow from which it has been hard for him and his daughter Susan to recover. We hope that this volume and the good wishes it brings from his many friends and admirers will help.

Joel L. Lebowitz
Oliver Penrose
Salvatore Torquato
Robert Ziff