

Foreword

This volume contains lectures given at the second of the series of international Gordon Godfrey workshops. These workshops have been held annually since 1991 at the University of New South Wales, each covering a novel research area in condensed matter physics that is of topical interest. They are jointly organised by the School of Physics at the University of New South Wales and the Department of Theoretical Physics at the Australian National University. The late Gordon Godfrey was an Associate Professor of Physics at the University of New South Wales. He bequeathed his estate for the promotion and teaching of theoretical physics within the university.

The primary purpose of the workshops is to expose Australian post-graduate students in physics to both informal interaction and formal lectures from recognised international leaders in new research areas. Past experience has demonstrated again and again that if there is a need to be informed about a new field there is no substitute for personal contact and interaction. Australian students have been disadvantaged compared with their counterparts in other Western countries by the lack of opportunity to travel to overseas research centres.

The Gordon Godfrey International Workshop on Recent Advances in Two-dimensional and Nanostructure Electron Systems was held at the University of New South Wales on 20 and 21 July 1992. Australia has a strong tradition of research in condensed matter physics and it is fitting that an international meeting was held in Sydney in this significant new area. The lectures started from a level understandable to post-graduate students in physics. Fifty participants officially registered for the workshop and these included post-graduate students from five states and New Zealand.

The convenors thank Bob Clark and Richard Newbury who both gave extremely informative lectures at the workshop, Anne Merton who took care of the details of organisation, and Mick Benton, Toni Benton, Jim Kenna, and Brian Robson (Australian National University). Thanks go also to the Head of the School of Physics John Storey and to Geoffrey Opat of the University of Melbourne for his advice on successfully running workshops in Australia. Financial support for the workshop was provided by the University of New South Wales Gordon Godfrey Bequest, the University of New South Wales School of Physics, and the Department of Theoretical Physics, Research School of Physical Sciences, Australian National University.

Finally, we pay tribute to Mark Rasolt whose lectures appear in both the present and the first volume of Gordon Godfrey workshop lectures. A relatively young man, Mark died suddenly during a return flight to the United States at the end of a visit to the University of New South Wales in November 1992. The originality of Mark's ideas and his enthusiasm to communicate his ideas to all who cared to listen will be remembered by everyone who attended the first workshop. Mark was unable to give his lectures in person at the second workshop but he provided a printed version which appears in this volume. He was also to have contributed lectures to the third workshop in July 1993.

Mark Rasolt was a strong supporter of the concept behind the workshops. He will be greatly missed. This volume is dedicated to him.

David Neilson and Mukunda P. Das
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