### Proceedings of the

## CENTRE FOR MATHEMATICAL ANALYSIS

### **AUSTRALIAN NATIONAL UNIVERSITY**

Volume 15, 1987

Miniconference on Harmonic Analysis (Canberra, 17-20 June, 1987)

Edited by M. Cowling, C. Meaney, W. Moran

# PROCEEDINGS OF THE CENTRE FOR MATHEMATICAL ANALYSIS AUSTRALIAN NATIONAL UNIVERSITY

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### MINICONFERENCE ON HARMONIC ANALYSIS AND OPERATOR ALGEBRAS

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M. COWLING, C. MEANEY AND W. MORAN

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#### PREFACE

In 1987, the Centre for Mathematical Analysis ran a "Special Year" on Harmonic Analysis and Operator Algebras. Most of the activity involved was concentrated in the period from May to August, and in November and December; during this time the Centre was overrun with people with disparate interests, ranging through classical Harmonic Analysis, Representation Theory, Operator Algebras, Ergodic Theory, Number Theory, Non-commutative Topology, and Mathematical Physics; at the same time, the Centre's usual program in Partial Differential Equations, Functional Analysis, and Numerical Analysis was under way. Space was a problem, but this had its positive aspects too, as persons with different interests, thrown together by fate in the same office, ended up chatting with each other. Apart from informal discussions and regular and spontaneous seminars, two miniconferences were held in the May to August period, in the (forlorn) hope that all the visitors would get a chance to speak at one or the other of these, if not both. This is the result of the first of these miniconferences.

Our thanks go to the Centre for Mathematical Analysis, all of whose facilities were generously made available to us. In particular, we thank Professor Neil Trudinger, the Director, for suggesting the Special Year and for his support during the organisation thereof, and Doctor John Hutchinson and Professor Leon Simon, who were Acting Directors of the Centre during various critical phases of 1987. We are particularly grateful to Mrs Marilyn Gray, who handled the administration of the Special Year cheerfully and efficiently, and to Mrs Dorothy Nash and Mrs Jill Smith who, together with Marilyn, turned garbled manuscripts into nicely typed papers. Finally, thanks to all the participants, who also helped make the enterprise a success, both mathematically and otherwise.

M. Cowling, C. Meaney, W. Moran (Editors)