

THE JOURNAL  
*of*  
THE AUSTRALIAN MATHEMATICAL  
SOCIETY

VOL. IV - PART 3

AUGUST 1964

|   |   |     |
|---|---|-----|
| <i>Right invariant integrals on locally compact semi-groups . . . . .</i>   | J. H. MICHAEL                           | 273 |
| <i>Comments on the preceding paper of Michael . . . . .</i>   | P. S. MOSTERT                           | 287 |
| <i>A note on Green's theorem . . . . .</i>  | B. D. CRAVEN                            | 289 |
| <i>Averaging operators on the ring of continuous functions on a compact space . . . . .</i>   | BARRON BRAINERD                         | 293 |
| <i>On the radical of a category . . . . .</i>   | G. M. KELLY                             | 299 |
| <i>Projectivities in finite groups . . . . .</i>  | D. W. BARNES                            | 308 |
| <i>A generalization of <math>z!</math> . . . . .</i>  | W. B. SMITH-WHITE AND<br>V. T. BUCHWALD | 327 |
| <i>Computation of the generalised factorial function . . . . .</i>  | H. E. DORAN                             | 342 |
| <i>Stochastic non-linear programming . . . . .</i>  | M. A. HANSON                            | 347 |
| <i>Doppler broadened contour functions in the complex domain . . . . .</i>  | A. KEANE AND<br>B. E. CLANCY            | 354 |
| <i>Asymptotic properties of least-squares estimates of parameters of the spectrum of a stationary non-deterministic time-series . . . . .</i> | A. M. WALKER                            | 363 |

---

*Published for*  
THE AUSTRALIAN MATHEMATICAL SOCIETY  
*by P. Noordhoff N.V. - Groningen - The Netherlands*

---

## EDITORIAL BOARD

T. G. ROOM (Editor), E. S. BARNES, J. M. BLATT, T. M. CHERRY, C. S. DAVIS, H. S. GREEN, H. O. LANCASTER, H. C. LEVEY, P. A. P. MORAN, J. E. MOYAL, E. J. G. PITMAN, R. C. T. SMITH, W. B. SMITH-WHITE, G. E. WALL, K. C. WESTFOLD.

Manuscripts for publication in the *Journal* should be sent to the *Editor*, T. G. ROOM, University of Sydney, Sydney, Australia.

All other correspondence, orders for the *Journal*, exchanges, etc., except that directly concerned with the payments of accounts, should be addressed to the *Business Manager*, E. T. STELLER, University of Queensland, Brisbane, Queensland, Australia.

All subscriptions and correspondence connected with accounts should be sent to the *Treasurer*, C. S. DAVIS, University of Queensland, Brisbane, Queensland, Australia.

Each Volume of the *Journal* consists of four parts. Volume V will be published in 1965. The price per volume is £ 6.0.0 (Australian).

## RECIPROCITY AGREEMENTS

The Australian Mathematical Society has made Reciprocity Agreements with the American Mathematical Society, the Edinburgh Mathematical Society, the London Mathematical Society, the Deutsche Mathematiker Vereinigung and the Islenzka Staerdfraedafelagid using the agreement with the American Mathematical Society as a model. Under this agreement, members of these societies not normally resident in Australia may join the Australian Mathematical Society at half the current rates. Such members will not have the right to vote in our Society or have any other financial commitment. They will receive copies of the *Journal* free.

## OFFICERS OF THE SOCIETY

|                               |                |                     |
|-------------------------------|----------------|---------------------|
| <i>President</i>              | B. H. NEUMANN  | (A.N.U., Canberra)  |
| <i>Vice-Presidents</i>        | E. S. BARNES   | (Adelaide)          |
|                               | J. R. M. RADOK | (Adelaide)          |
| <i>Treasurer</i>              | C. S. DAVIS    | (Queensland)        |
| <i>General Secretary</i>      | C. F. J. UPTON | (Melbourne)         |
| <i>Publications Secretary</i> | G. E. WALL     | (Sydney)            |
| <i>Editor of Journal</i>      | T. G. ROOM     | (Sydney)            |
| <i>Councillors</i>            | J. M. BLATT    | (Univ. of N.S.W.)   |
|                               | J. J. MAHONY   | (Western Australia) |
|                               | E. J. HANNAN   | (A.N.U., Canberra)  |
|                               | H. C. LEVEY    | (Western Australia) |
|                               | E. J. WILLIAMS | (Melbourne)         |
|                               | D. ELLIOTT     | (Tasmania)          |

---