

The following papers have been accepted for publication and will appear shortly :

HUZURBAZAR, V. S. On the certainty of an inductive inference.

GILLIS, J. Correlated random walk.

ZIMAN, J. M. The electron-phonon interaction, according to the adiabatic approximation.

PENROSE, R. On best approximate solutions of linear matrix equations.

HARTREE, D. R. The interpolation of atomic wave functions.

RIDLEY, E. C. The interpolation of atomic fields.

RIDLEY, E. C. The self-consistent field for Mo^+ .

HAJNAL, J. The ergodic properties of non-homogeneous finite Markov chains.

McLAIN, D. H. On locally nilpotent groups.

ALGUNEID, A. R. Analytical degeneration of complete twisted cubics.

CHAMBERS, R. G. The penetration depth in impure superconducting tin.

HAMMERSLEY, J. M. and NELDER, J. A. Sampling from an isotropic Gaussian process.

ABBOTT, M. R. A theory of the propagation of bores in channels and rivers.

MAHLER, K. On the Taylor coefficients of rational functions.

MACK, C. On clumps formed when convex laminae or bodies are placed at random in two or three dimensions.

DE, S. C. Contributions to the theory of Stokes waves.

WILLIAMS, W. E. Diffraction by a cylinder of finite length.

HAWTHORNE, W. R. The growth of secondary circulation in frictionless flow.

NORTHCOTT, D. G. A note on the $A\Phi + B\Phi$ theorem and the theory of local rings.

CONTENTS OF BIOLOGICAL REVIEWS

Vol. 30, Part 3. August 1955

C. LADD PROSSER. Physiological variation in animals.

HANS ELIAS. Liver morphology.

THEODORE HOLMES BULLOCK. Compensation for temperature in the metabolism and activity of poikilotherms.

CONTENTS

	PAGE
COHN, P. M. A non-nilpotent Lie ring satisfying the Engel condition and a non-nilpotent Engel group	401
PENROSE, R. A generalized inverse for matrices	406
FAN, KY. Some inequalities concerning positive-definite Hermitian matrices	414
DENNIS, S. C. R. and POOTS, G. The solution of linear differential equations	422
COX, D. R. The analysis of non-Markovian stochastic processes by the inclusion of supplementary variables	433
SHENTON, L. R. A semi-infinite random walk with discrete steps	442
POWELL, F. C. A notation for vectors and tensors	449
BASTIN, E. W. and KILMISTER, C. W. The concept of order. II. Measurements	454
SCHIELDROP, EDGAR B. A principle in classical mechanics with a 'relativistic' path-element extending the principle of least action	469
JONES, D. S. Note on Whitham's 'The propagation of weak spherical shocks in stars'	476
DOUGLAS, A. S., HARTREE, D. R. and RUNCIMAN, W. A. Atomic wave functions for gold and thallium	486
BALLINGER, R. A. and MARCH, N. H. Molecules with tetrahedral and octahedral symmetry. II. Energy calculations and molecular constants for methane, silane and germane	504
BALLINGER, R. A. and MARCH, N. H. Molecules with tetrahedral and octahedral symmetry. III. Theoretical basis of the 'smoothing approximation'	517
KAHN, F. D. The correction of observational data for instrumental band width	519
 RESEARCH NOTES:	
CHISHOLM, J. S. R. and DE BORDE, A. H. A new derivation of the fundamental formulae in Fowlerian statistical mechanics	526
MICHAEL, D. H. The stability of a combined current and vortex sheet in a perfectly conducting fluid	528
DUNGEY, J. W. Deductions from the perfect cosmological principle	532
PIRANI, F. A. E. On the perihelion motion according to Littlewood's equations	535
GEE, B. D. On Riemann integrability	537
RAGAB, F. M. Some formulae for the associated Legendre functions of the first kind	538

*Printed in Great Britain at the University Press, Cambridge
(Brooke Crutchley, University Printer)*