

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

- LEVINE, S. On the interaction of colloidal particles. IV and V.
- AFRIAT, S. N. The quadratic forms positive over a linear manifold.
- BESICOVITCH, A. S. A problem on topological transformations of the plane.
- BARTLETT, M. S. and KENDALL, D. G. On the use of the characteristic functional in the analysis of some stochastic processes occurring in physics and biology.
- NOBLE, M. E. Extensions and applications of a Tauberian theorem due to Valiron.
- CASSELS, J. W. S. An extension of the law of the iterated logarithm.
- KURSONOGLU, B. Space-time on the rotating disk.
- DAVIES, D. R. A note on Rayleigh's problem for a plate of finite width.
- FRIEDLANDER, F. G. On the recurrent solutions of a class of non-linear differential equations.
- FOSTER, F. G. Markoff chains with an enumerable number of states and a class of cascade processes.
- CASSELS, J. W. S. Some metrical theorems on Diophantine approximation. V. On a conjecture of Mahler.
- WEITZENBÖCK, R. W. On the line-comitants of a space cubic.
- STEWART, R. W. Triple velocity correlations in isotropic turbulence.
- BARTLETT, M. S. The frequency goodness-of-fit test for probability chains.
- GILLOCH, J. M. and MCCREA, W. H. The relativistic mass of a rotating cylinder.
- DRAZIN, M. P. The general motion of a sphere in a viscous liquid.
- CHALK, J. H. H. and ROGERS, C. A. On the product of three homogeneous linear forms.
- GILL, S. A process for the step-by-step integration of differential equations in an automatic digital computing machine.
- PROUDMAN, I. A comparison of Heisenberg's spectrum of turbulence with experiment.
- REUTER, G. E. H. A boundedness theorem for non-linear differential equations of the second order.
- GARSTANG, R. H. Self-consistent field, with exchange, for Ne III.
- CLARKE, L. E. On the product of three non-homogeneous linear forms.

CONTENTS

	PAGE
SLATER, N. B. The distribution of the integers N for which $\{\theta N\} < \phi$	525
INGHAM, A. E. A further note on trigonometrical inequalities	535
HENSTOCK, R. Sets of uniqueness for trigonometric series and integrals	538
COOPER, R. The extremal values of Legendre polynomials and of certain related functions	549
HARTLEY, E. M. Two maximal subgroups of a collineation group in five dimensions	555
OLVER, F. W. J. A new method for the evaluation of zeros of Bessel functions and of other solutions of second-order differential equations	570
LEDERMANN, WALTER. On the asymptotic probability distribution for certain Markoff processes	581
RAMAKRISHNAN, ALLADI. Stochastic processes relating to particles distributed in a continuous infinity of states	595
ILLINGWORTH, C. R. Unsteady laminar flow of gas near an infinite flat plate	603
COOPER, J. L. B. The characterization of quantum-mechanical operators	614
COOPER, J. L. B. The paradox of separated systems in quantum theory	620
CARLSON, B. C. and RUSHBROOKE, G. S. On the expansion of a Coulomb potential in spherical harmonics	626
JAEGER, J. C. Conduction of heat in a solid with a power law of heat transfer at its surface	634
RESEARCH NOTES:	
CASSELS, J. W. S. A theorem of Vinogradoff on uniform distribution	642
COOKE, J. C. The boundary layer of a class of infinite yawed cylinders	645
GUPTA, SURAJ N. On the interaction of vector mesons with nucleons	649
DUNGEY, J. W. A note on magnetic fields in conducting materials	651
PROCEEDINGS	655
STATEMENT OF ACCOUNTS	659

Dutch reprint