

PROCEEDINGS  
OF  
THE EDINBURGH MATHEMATICAL SOCIETY

SERIES 2—VOL. III—PART I

EDITED BY

Professor H. W. TURNBULL, M.A.

AND

Dr E. T. COPSON.

CONTENTS

	PAGE
INTERPOLATION BY MEANS OF GIVEN DIFFERENCES (CENTRAL-DIFFERENCE NOTATION): W. F. SHEPPARD ... ..	1
SETS OF POINTS SELF-CONJUGATE WITH REGARD TO A QUADRIC IN $n$ DIMENSIONS: D. M. Y. SOMMERVILLE ... ..	6
THE COMPOSITION OF LINEAR DIFFERENTIAL SYSTEMS: J. M. WHITTAKER	10
METRICAL COORDINATES IN NON-EUCLIDEAN GEOMETRY: D. M. Y. SOMMERVILLE ... ..	16
A NOTE ON RESULTANTS OF EQUATIONS IN A CYCLIC NUMBER SYSTEM: R. WILSON ... ..	26
THE POLAR PROPERTIES OF THE PLANE TRINODAL QUARTIC CURVE: DRYDEN RUTTER ... ..	30
SOLUTION WITH AXIAL SYMMETRY OF EINSTEIN'S EQUATIONS OF TELEPARALLELISM: J. D. PARSONS. ... ..	37
THE TRITANGENT CIRCLES OF A CIRCULAR QUARTIC CURVE: H. W. RICHMOND ... ..	46
ON APPELL'S FUNCTION $P(\theta, \phi)$ : PIERRE HUMBERT ... ..	53
ON INTERPOLATION BY ITERATION OF PROPORTIONAL PARTS, WITHOUT THE USE OF DIFFERENCES: A. C. AITKEN ... ..	56

*Issued March 1932*

EDINBURGH:

PRINTED BY LINDSAY & CO., LTD., 17 BLACKFRIARS STREET,

AND PUBLISHED FOR THE SOCIETY BY

G. BELL & SONS, LTD., PORTUGAL STREET, LONDON, W.C.2

THE EDINBURGH MATHEMATICAL SOCIETY is instituted for the promotion and extension of Mathematical Science—Pure and Applied.

It consists of Ordinary and Honorary Members.

Candidates for admission as Ordinary Members are proposed and seconded at one ordinary meeting of the Society, and balloted for at the next, a majority of at least two-thirds of the members present being necessary for election.

The Annual Subscription for ordinary membership is ten shillings. Any Ordinary Member may compound for his Annual Subscription by the payment of six guineas in one sum, subject to a reduction of one guinea after ten years' membership and a reduction of one guinea for each subsequent five years' membership of the Society.

The Council of the Society may nominate as Honorary Members persons eminently distinguished in the Mathematical Sciences. The mode of election is, otherwise, the same as for Ordinary Members.

Each Member whose Subscription is not in arrears receives the *Proceedings* and the *Mathematical Notes* as published.

Members wishing to complete their sets of the first series of *Proceedings* can have back volumes—so far as these are in print—on application to the Hon. Secretary, on payment of five shillings per volume, in addition to postages. Other intending purchasers of volumes of *Proceedings* should apply to the Publishers, G. BELL & SONS, LTD.

Presents to the Library of the Edinburgh Mathematical Society should be addressed to the

HON. LIBRARIAN, EDINBURGH MATHEMATICAL SOCIETY,  
16 CHAMBERS STREET, EDINBURGH.

All papers and other communications should be sent to the

HON. SECRETARY,  
EDINBURGH MATHEMATICAL SOCIETY,  
16 CHAMBERS STREET, EDINBURGH.