

Insectivor—Hedgehog .....	48
Chiroptera—Bat .....	48
Primates—{ Man .....	48
Macacus .....	48
Cebus .....	54
Ungulata—Horse .....	60
Edentata—Armadillo .....	60
Carnivora—Dog .....	50 +
Rodent—Rabbit .....	44

It is thus clear that the typical eutherian number is a high one, and the occurrence of 48 chromosomes in three different orders would seem to indicate that it may be about the typical number.

The facts recorded above are of especial interest in that they indicate a unity of chromosome constitution above the marsupial level and effectively dispose of the suggestion that extensive polyploidy may have occurred within this subclass.

In the marsupials the chromosome number is a low one and in the opossum is 22. At first sight it might appear that the eutherian condition might have arisen from this by tetraploidy. There are two objections to this, however. In the first place the bulk of the chromatin in marsupials is about the same as in the eutheria, using the sex chromosome as our measure. In the second place, polyploidy could scarcely occur successfully in animals with X-Y sex chromosomes, as most mammals possess, because of the complications occurring in the sex chromosome balance. A full discussion of the theoretical bearing which these results have is being sent to press with this note.

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## THE AMERICAN MATHEMATICAL SOCIETY

THE two hundred and thirty-ninth regular meeting of the American Mathematical Society was held at Columbia University on Saturday, February 28, 1925, extending through the usual morning and afternoon sessions. The attendance included sixty-one members of the society. There was no meeting of the council or of the trustees.

At the beginning of the afternoon session a paper was read, at the request of the program committee, by Professor J. W. Alexander, of Princeton University, on "Problems in the topological theory of manifolds."

The following other papers were read:

*Minimal varieties of two or three dimensions whose element of arc is a perfect square:* C. L. E. MOORE.

*Fields of parallel vectors in a Riemannian geometry:* L. P. EISENHART.

*On the Riemann tensor:* G. Y. RAINICH.

*Integrals in curved space:* G. Y. RAINICH.

*Comitants of a curve under inversion:* FRANK MORLEY.

*Null geometry:* EDWARD KASNER.

*Extensions of the equations of Gauss and Codazzi:* LOUIS INGOLD.

*Tensors determined by a hypersurface in a Riemann space:* HARRY LEVY.

*Symmetric tensors of the second order whose covariant derivatives vanish:* HARRY LEVY.

*Congruences with constant absolute invariants:* H. L. OLSON.

*On normal forms of differential equations:* W. F. OSGOOD.

*Two new arctangent relations for  $\pi$ :* A. A. BENNETT.

*Diophantine arccotangent relations:* A. A. BENNETT.

*The fitting of curves by the use of moments and conjugate moments:* E. L. DODD.

*Linear complex of conics:* E. E. LIBMAN.

*On the map-coloring problem, with particular reference to connected sets of pentagons:* C. N. REYNOLDS.

*Solution of the problem of the thick rectangular plate, clamped or supported at its edges and under uniform or central load:* C. A. GARABEDIAN.

*A complete solution of the cubic equation:* GLENN JAMES.

*Functions of two variables for which the double integral does not exist:* R. L. JEFFERY.

*On the number of elements in a group which have a power in a given conjugate set:* LOUIS WEISNER.

*The number of even and odd absolute permutations of  $n$  letters:* J. M. THOMAS.

*Note on the projective geometry of paths:* J. M. THOMAS.

*Combinatorial analysis situs:* J. W. ALEXANDER.

*On the regions of convergence of real power series in several variables:* O. D. KELLOGG.

*Transcendental transcendency of certain functions of Poincaré:* J. F. RITT.

*Concerning the sum of a countable infinity of mutually exclusive continua:* J. R. KLINE.

*On extending a continuous (1, 1) correspondence of two plane continuous curves to a correspondence of their planes:* H. M. GEHMAN.

*The inverse problem of the calculus of variations.* Preliminary report: J. H. TAYLOR.

*On the problem of inversion of abelian integrals:* S. LEFSCHETZ.

*Osculating curves and surfaces:* PHILIP FRANKLIN.

*On the momental constants of a summable function:* R. E. LANGER.

*The solution of a difference equation by trigonometric integrals:* NORBERT WIENER.

*On Gibbs' phenomenon:* T. H. GRONWALL.

*Some remarks on Dirichlet's series:* EINAR HILLE.

*Remarks on convex regions:* BÉLA DE KERÉKJÁRTÓ.

The society will meet at Columbia University, May 2, 1925.

W. BENJAMIN FITE  
Acting Secretary