que chose, je me fusse obligé de la prendre pour bonne encore après, lorsqu'elle auroit peut-être cessé de l'être, ou que j'aurois cessé de l'estimer telle.

(ibid., III*)*

... soit que nous veillions, soit que nous dormions, nous ne nous devons jamais laisser persuader qu'à l'évidence de notre raison. Et il est à remarquer que je dis de notre raison, non point de notre imagination ni de nos sens ...

(ibid., IV*)*

... la raison ne nous dicte point que ce que nous voyons ou imaginons ainsi soit véritable, mais elle nous dicte bien que toutes nos idées ou notions doivent avoir quelque fondement de vérité ; ...

(ibid., IV*)*

... ils me semble pareils à un aveugle qui, pour se battre sans désavantage contre un qui voit, l'auroit fait venir dans le fond de quelque cave fort obscure: et je puis dire que ceux-ci ont interêt que je m'abstienne de publier les principes de la philosophie dont je me sers ; car, étant très-simples et très évidents, comme ils sont, je ferois quasi le même en les poubliant que si j'ouvrois quelques fenêtres et faisois entrer du jour dans cette cave où ils sont descendus pour se battre.

(ibid., VI*)*

Je n'ai jamais écrit ni jugé que l'esprit ait besoin d'idées qui soient quelque chose de différent de la faculté qu'il a de penser.

(Lettres, tom. II*)*

... je n'ai jamais écrit ni pensé que de telles idées [*innées*] fussent actuelles, ou qu'elles fussent je ne sais quelles espèces distinctes de la faculté même que nous avons de penser; et même je dirai plus, qu'il n'y a personne qui soit plus éloigné que moi de tout ce fatras d'entités scolastiques.

(ibid.)

... comme si le principe d'un système pouvoit être un principe logique, et comme si la connoissance des principes en général étoit du ressort de la dialectique ...

(ibid.)

MOVIMENTO CIENTÍFICO

CONGRESSO LUSO ESPANHOL PARA O PROGRESSO DAS CIÊNCIAS

LISBOA — OUTUBRO DE 1950

Reunirá em Lisboa, em local oportunamente a indicar, de 23 a 29 de Outubro próximo, o Congresso Luso-Espanhol para o Progresso das Ciências.

Transcrevemos a seguir, na íntegra, o

Regulamento do Congresso Luso-Espanhol de Lisboa — 1950

Artigo 1.º — O Congresso Luso-Espanhol para o Progresso das Ciências reunirá em Lisboa, de 23 a 29 de Outubro de 1950.

Art. 2.º — O Congresso terá as nove secções previstas nos Estatutos das Associações Portuguesa e Espanhola para o Progresso das Ciências.

§ único — Os presidentes das secções poderão subdividir estas em sub-secções de determinados ramos científicos.

Art. 3.º — Poderão tomar parte no Congresso, além dos sócios das duas Associações, os membros das Ordens e Sindicatos Nacionais de profissões liberais para cujo exercício seja necessário diploma de estudos superiores.

Art 4.º — A admissão e publicação dos trabalhos são da competência das mesas das secções.

Art. 5.º — A discussão nas secções far-se-á sobre os resumos publicados, podendo, porém, antes de aberta a discussão, os autores desses trabalhos usar da palavra sobre o assunto durante o período máximo de quinze minutos.

§ 1.º — Cada congressista não poderá intervir na discussão de cada trabalho por mais duma vez e durante mais de cinco minutos.

§ 2.º — No final da discussão, o autor do trabalho poderá responder por um período de tempo não superior a dez minutos.

§ 3.º — As mesas das secções poderão organizar conferências a horas determinadas sobre assuntos de especial interesse, tendo o conferente o direito a usar da palavra para exposição do tema escolhido por período superior ao estabelecido no corpo deste artigo e não havendo discussão sobre a matéria exposta.

Art. 6.º — A organização geral do Congresso e em especial a das sessões inaugural e de encerramento são das atribuições da Comissão Executiva, que resolverá sobre quaisquer dúvidas ou omissões deste regulamento.

Art. 7.º — A Secretaria Geral do Congresso é o órgão executor da Comissão Executiva.

O Congresso divide-se em nove secções: 1.ª) Ciências Matemáticas; 2.ª) Astronomia, Geodesia, Geofísica e Geografia; 3.ª) Física e Química; 4.ª) Ciências Naturais; 5.ª) Ciências Sociais; 6.ª) Ciências Filosóficas e Teológicas; 7.ª) Ciências Históricas e Filológicas; 8.ª) Ciências Médicas e Biológicas e 9.ª) Engenharia, Arquitectura e outras ciências aplicadas.

A 1.ª secção — Ciências Matemáticas — será presidida pelo Doutor José Vicente Gonçalves, professor da Faculdade de Ciências de Lisboa. O vice-presidente será o Doutor Almeida Costa, professor da Faculdade de Ciências do Porto e secretário o assistente da Faculdade de Ciências de Lisboa, Dr. David Lopes Gagean.

Enviaram comunicações para o Congresso alguns dos sócios da Sociedade Portuguesa de Matemática.

M. Z.

CONGRESSO INTERNACIONAL DE MATEMÁTICOS

De 30 de Agosto a 6 de Setembro teve lugar em Cambridge, Massachussetts, U. S. A., o Congresso Internacional de Matemáticos a que vimos há já muito fazendo referência pela importância que merece uma tal reunião. O único Português que participou no Congresso foi o professor da Universidade de Nebraska Dr. Hugo Ribeiro que apresentou uma comunicação (secção I). Além desta e da do Dr. António Gião (secção V) a que já nos referimos, enviaram também comunicações o Prof. Dr. Ruy Luís Gomes (L'intégrale $\int_X f(x)\,dx$ comme transformation continue par rapport à X et à $f(x)$ — secção III) e o Prof. Dr. António A. R. Monteiro, da Universidade de San Juan, Argentina (Note on uniform continuity — secção II — em colaboração com o Professor Brasileiro Dr. M. Matos Peixoto).

Não podemos fornecer ao leitor pormenores sobre o Congresso mas do programa transcrevemos — apesar da sua extensão — a lista das comunicações, conferências e discussões.

É esta, sem dúvida, uma informação preciosa e talvez a mais característica manisfestação da importância do Congresso.

M. Z.

Do Programa do C. I. M.

Agosto, 30.

Alocuções

A. Beurling, Univ. de Uppsala.
On null-sets in harmonic analysis and function theory.

H. Hopf, Escola Politécnica Federal, Zurich.
Die n-dimensionalem Sphären und projektiven Räume in der Topologie.

H. Cartan, Univ. de Paris.
Sur les fonctions analytiques de variables complexes.

R. L. Wilder, Univ. de Michigan.
The cultural basis of mathematics.

A. Mostowski, Univ. de Varsóvia.
On the applications of logic to mathematics and of mathematics to logic.

Agosto, 31.

S. Bochner, Univ. de Princeton.
Laplace operator on manifolds.

K. Gödel, Institute for Advanced Study.
Rotating universes in general relativity theory.

Conferência sobre Álgebra Geometria Algébrica

O. Zariski, Univ. de Harvard.
The fundamental ideas of abstract algebraic geometry.

A. Weil, Univ. de Chicago.
Number-theory and algebraic geometry.

(As alocuções anteriores foram feitas por convite da Comissão Organizadora).

Secção II — Análise

H. A. Rademacher, Univ. de Pennsylvania.
Remarks on the theory of partitions.

A. Dinghas, Univ. de Berlim.
Über eine Intergralgleichung für die Polynomen der Potential-theorie.

B. Kjellberg, Univ. de Uppsala.
On the growth of minimal positive harmonic functions in a plane region.

F. Leja, Univ. de Cracóvia.
Une méthode élémentaire de résolution du problème de Dirichlet dans le plan.

E. P. Miles, Jr., Instituto Politécnico de Alabama.
A minimal problem for harmonic functions in space.

G. Choquet, Univ. de Paris.
Fonctions croissantes d'ensembles et capacités.

S. Agmon, Rice Institute.
On the existence of summation functions for a class of Dirichlet series.

H. Delange, Univ. de Clermont-Ferrand.
Sur les théorèmes taubériens pour les séries de Dirichlet.

E. G. Straus, Univ. da Califórnia — Los Angeles.
On a class of integral valued Dirichlet series.

K. Chandrasekharan, Tata Institute of Fundamental Research, Bombaim.
On the summation of multiple Fourier series.

R. J. Duffin e A. C. Schaeffer, Carnegie Institute of Technology e Univ. de Wisconsin.
A class of non-harmonic Fourier series.

J. Karamata, Univ. de Belgrado.
Sur une notion de continuité régulière avec application aux séries de Fourier.

O. Szász, National Bureau of Standards.
Tauberian theorems for summability (R_1).

Secção III — Geometria e Topologia

L. A. Santalo, Univ. de Rosario.
Integral geometry in general spaces.

H. W. Alexander, Adrian College.
The edge of regression of pseudo-spherical surfaces.

J. de Cicco, Univ. De Paul.
Polygenic functions of several complex variables.

P. C. Hammer, Laboratório Científico de Los Alamos.
Convex bodies associated with a convex body.

A. Kroch, Instituto de Tecnologia, Haifa.
Solids filling space.

J. Kronsbein, Evansville College.
A method of visualizing four dimensional rotations.

L. A. MacColl, Bell Telephone Laboratories.
Geometrical properties of two-dimensional wave motion.

R. Rado, King's College, London.
Covering theorems for systems of similar sets of points.

H. Steinhaus, Univ. de Wroclaw.
The amount of change of an arc.

M. Villa, Univ. de Bolonha.
Richerche recenti sulle transformationi puntuali.

Secção IV — Probabilidades e Estatística, Ciência Actuarial, Economia

E. Lukacs e O. Szász, National Bureau of Standards e Univ. de Cincinnati.
Some non-negative trigonometric polynomials connected with a problem in probability.
Agosto, 31.

W. D. Baten, Michigan State College.
A history of probability in the United States of America to 1926.

N. Norris, Hunter College.
Proofs of the monotonic increasing character of general means.

E. Michalup, Univ. de Caracas.
New developments in interpolation formulae.

H. E. Stelson, Michigan State College.
The accuracy of linear interpolation

S. H. Khamis, Statistical Office, United Nations.
A note on the general Chebycheff inequality.

Conferência sobre Álgebra
Grupos e Álgebra Universal

G. Birkhoff, Univ. de Harvard.
Problems in lattice theory.

H. Zassenhaus, Univ. de McGill.
Modern developments in the theory of finite simple groups.

S. MacLane, Univ. de Chicago.
Cohomology theory of abelian groups.

R. Baer, Univ. de Illinois.
Cohomology theory of a pair of groups.

C. Chevalley, Univ. de Columbia.
Determination of the Betti numbers of the exceptional Lie groups.

Conferência sobre Análise
Análise Global

L. Bers, Univ. de Syracuse.
Singularities of minimal surfaces.

S. Bergman, Univ. de Harvard.
Geometric methods in the theory of functions of several complex variables.

L. Cesari e *T. Radó*, Univ. de Bolonha e Univ. do Estado de Ohio.
Applications of area theory in analysis.

C. B. Morrey, Univ. de Califórnia.
Problem of Plateau on a Riemannian manifold.

Secção III — Geometria e Topologia

E. M. Bruins, Univ. de Amsterdam.
The symbolical method in algebraic geometry.

P. Du Val, Univ. de Georgia.
Regular surfaces of genus 2.

L. Godeaux, Univ. de Liège.
Singularités des points de diramation isolés des surfaces multiples.

T. R. Hollcroft, Wells College.
Systems of singular primals in S_r.

C. C. Hsiung, Univ. de Northwestern.
A general theory of conjugate nets in projective hyperspace.

D. Pedoe, Univ. de Londres.
The intersection of algebraic varieties.

T. G. Room, Univ. de Sydney.
Quadrices associated with the Clifford matrices.

C. R. Wylie, Univ. de Utah.
Linear line involutions without a complex of invariant lines.

Secção IV — Probabilidades e Estatística, etc.

M. Fréchet, Univ. de Paris.
Sur diverses définitions de la moyenne d'un élément aléatoire de nature quelconque.

R. Fortet, Univ. de Caen.
Eléments aléatoires de nature quelconque.

M. Castellani, Univ. de Kansas City.
Random functions on Divisia ensemble.

E. S. Cansado, Conselho Superior de Estatística, Madrid.
On the logarithmico-Pearson distributions.

F. I. Toranzos, Univ. Nacional de Cuyo, Argentina.
A frequency system that generalizes the Pearson system.

H. v. Schelling, Laboratório Médico Naval de Pesquisas.
Distribution for the ordinal number of simultaneous events which last during a finite time.

G. Tintner, Iowa State College.
Some formal relations in multivariate analysis.

Secção V — Física Matemática e Matemáticas Aplicadas

A. Charnes e *E. Saibel*, Instituto Carnegie de Tecnologia.
On some cavitational flows in lubrication.

T. M. Cherry, Univ. de Melbourne.
Exact solutions for flow of a perfect gas in a two-dimensional Laval nozzle.

J. C. Cooke, Univ. de Malaya.
Pohlhausen's method for three-dimensional boundary layers.

A. G. Hansen e *M. H. Martin*, Univ. de Maryland.
Some geometrical properties of plane flows.

M. Z. E. Krzywoblocki, Univ. de Illinois.
On the theories of isotropic turbulence as applied to compressible fluids.

C. K. Thornhill, Armament Research Establishment, Fort Halstead, Inglaterra.
The dispersion, under gravity, of a column of fluid supported on a rigid horizontal plane.

C. Truesdell, Univ. de Maryland e Laboratório Naval de Pesquizas.
A new vorticity theorem.

C. T. Wang, Univ. de Nova York.
The application of variational methods to the compressible flow problems.

E. H. Zarantonello, Univ. de Harvard.
A constructive theory for the equations of flows with free boundaries.

C. G. Darwin, Cambridge, Inglaterra.
The refractive index of an ionized gas.

P. C. Bergmann, Univ. de Syracuse.
Covariant quantization of non-linear field theories.

A. J. Coleman, Univ. de Toronto.
Gravitational shift in the solar spectrum.

P. Drumaux, Univ. de Genebre.
La récession de nébuleuses extra-galactiques.

A. Gião, Reguengos, Alentejo, Portugal.
On the origin of positive and negative electricity.

O. E. Glenn, Lansdowne, Pennsylvania.
The mathematical nature of Lamarck's hypothesis that a biological species tends to increase in size.

K Sarginson, Somerville College, Oxford, Inglaterra.
An expansion of a four-dimensional plane wave in terms of eigenfunctions.

E. J. Schremp, Naval Research Laboratory.
On the interpretation of the parameters of the proper Lorentz group.

A. H. Taub, Univ. de Illinois.
Empty space times admiting three parameter groups of motion.

E. E. Witmer, Univ. de Pennsylvania.
Integral relationships between nuclear quantities.

Setembro, 1.

Alocuções

M. Morse, Institute for Advanced Study.
Recent advances in variational theory in the large.

A. Rome, Univ. de Louvain.
The calculation of an eclipse of the sun according to Theon of Alexandria.
(Alocuções a convite da Comissão Organizadora).

Secção I — Álgebra e Teoria dos Números

A. H. Clifford, Univ. de John Hopkins.
A class of partially ordered abelian groups related to Ky Fan's characterizing subgroups.

D. Ellis, Univ. de Florida.
On distance sets and distanciallity in naturally metrized groups.

F. Loonstra, Technische Hogeschool, Delft.
The classes of ordered groups

H. Ribeiro, Univ. de California.
On lattices of abelian groups with a finite basis.

R. M. Thrall, Univ. de Michigan.
On a Galois connection between algebras of linear transformations and lattices of subspaces of a vector space.

B. H. Arnold, Oregon State College.
Distributive lattices with a third operation defined.

D. Tamari, Instituto Henri Poincaré, Paris.
Generalized Malcev chains and conditions.

A. L. Foster, Univ. da Califórnia.
Boolean-Partition-Vector extensions and (sub) direct-powers of rings and general operational algebras.

F. Haimo, Univ. de Washington.
Some limits of Boolean algebras.

F. Harary, Univ. de Michigan.
On complete atomic proper relation algebras.

Secção II — Análise

A. Erdélyi, Instituto de Tecnologia da Califórnia.
The general form of hypergeometric series of two variables.

R. S. J. Llosá, Madrid, Espanha.
Les fondements d'une théorie générale de séries divergentes.

G. G. Lorentz, Univ. de Toronto.
Direct theorems on methods of summability.

J. C. P. Miller, National Bureau of Standards.
The determination of converging factors for the asymptotic expansions for the Weber parabolic cylinder functions.

C. N. Moore, Univ. de Cincinnati.
Convergence factor theorems for summable series whose partial sums form unbounded sequences.

W. Rudin, Univ. de Duke.
Uniqueness theory for Hermite series.

R. E. Graves, Univ. de Minnesota
A closure criterion for orthogonal functions.

E. F. Beckenbach e *L. K. Jackson*, Univ. da Califórnia em Los Angeles.
Subfunctions and elliptic partial differential equations.

P. P. Gillis, Univ. de Bruxelas.
Equations de Monge-Ampère, du type élliptique, et problèmes réguliers du calcul des variations.

F. John, Univ. de New York.
On the fundamental solution of linear elliptic partial differential equations with analytic coefficients.

M. H. Protter, Univ. de Syracusa.
Boundary value problems for a partial differential equation of mixed type.

C. B. Morrey, Jr,. Univ. da Califórnia.
Differentiability properties of the solutions of variational problems for multiple integrals.

M. Shiffman, Univ. de Stanford.
On variational analysis in the large.

L. C. Young, Univ. de Wisconsin.
Generalized parametric surfaces.

Secção III — Geometria e Topologia

A. Barnhart, Univ. de Oklahoma.
Irreducible rings in minimal five color maps.

A. Errera, Univ. de Bruxelas.
Sur les conséquences, pour le problème de quatre couleurs, d'un théorème de M. Whitney.

B. Gelbaum, *G. Kalisch* e *J. M. H. Olmsted*, Univ. de Minnesota.
On the embedding of topological semigroups and integral domains.

R. Inzinger, Technische Hochschule, Viena.
A realization of the geometry of the Hilbert space in the plane.

M. Jerison, Univ. de Illinois.
Characterizations of certains spaces of continuous functions.

N. J. Fine e *G. E. Schweigert*, Univ. da Pennsylvania.
On the structure of the group of homeomorphisms of an arc.

C. N. Reynolds, Univ. de West Virginia.
Applications of a calculus of finite differences to the 4-color problem.

H. C. Wang, Univ. do Estado de Louisiana.
Metric space and its group of isometries.

Secção VI — Lógica e Filosofia

T. Skolem, Instituto Matemático, Oslo.
Remarks of the foundation of set theory.

H. Blumberg, Univ. do Estado de Ohio.
On a procedure for proving many theorems and obtaining new ones through transfinite induction.

M. Dolcher, Univ. de Trieste.
On displacements of systems of data and structures.

J. B. Rosser, Institute of Numerical Analysis, National Bureau of Standards.
Transfinite cardinal arithmetic in Quine's New Foundations.

R. M. Robinson, Univ. da Califórnia.
An essentially undecidable axiom system.

W. Szmielew e *A. Tarski*, Univ. da Califórnia.
Mutual interpretability of some essentially undecidable theories.

A. Robinson, College of Aeronautics, Cranfield, U. K.
On the application of symbolic logic to algebra.

Secção VII — História e Educação

G. L. Coolidge, Univ. de Harvard.
The origin of polar coordinates.

C. B. Boyer, Colégio de Brooklyn.
The foremost textbook of modern times.

H. W. Turnbull, Univ. de St. Andrews, Escócia.
The Scottish contribution to the early history of the calculus.

E. Neustein, Viena, Austria.
Fernwirkungen der arabischen und indischen Geometrie auf die abendländische Mathematik und Astrophysik.

P. S. Jones, Univ. de Michigan.
Brook Taylor and the mathematical theory of linear perspective, his contributions and influence.

M. Richardson, Colégio de Brooklyn.
Fundamentals in the teaching of undergraduate mathematics.

L. E. Boyer, Millersville State Teachers College.
A note on the theaching of general mathematics.

R. L. Swain, Univ. do Estado de Ohio.
Condensed graphs.

W. Betz, Public School System of Rochester.
Mathematics for the millions, or for the few?

B. H. Gundlach, Univ. de Arkansas.
Gestalt theory in the teaching of mathematics.

Conferência sobre Análise — Métodos extremais e Teoria geométrica das funções de variável complexa

L. V. Ahlfors, Univ. de Harvard.
Introduction.

A. C. Schaeffer e *D. C. Spencer*, Univ. de Wisconsin e Univ. de Stanford.
Coefficient regions for schlicht functions.

M. M. Schiffer, Univ. Hebraica, Jerusalem.
Variational methods in the theory of conformal mapping.

H. Grunsky, Univ. de Tübingen.
Über Tchebycheffche Probleme.

R. Nevanlinna, Univ. de Zurique.
Surfaces de Riemann.

G. Szegö, Univ. de Stanford.
On certain set-functions in the theory of functions and in mathematical physics defined by extremum properties.

Conferência sobre Topologia — Teoria da homologia e homotopia

W. Hurewicz, Instituto de Tecnologia de Massachussetts.
Homology and homotopy.
(Alocução a convite da Comissão Organizadora).

S. Eilenberg, Univ. de Columbia.
Homotopy groups and algebraic homology theories.

J. H. C. Whitehead, Univ. de Oxford.
Algebraic homotopy theory.

G. W. Whitehead, Instituto de Tecnologia de Massachussets.
Homotopy groups of spheres.

Secção I — Álgebra e Teoria dos Números

G. Y. Rainich, Univ. de Michigan.
Invariants of vectors with non-commutative components, and application to geometry.

G. L. A. Papy, Univ. de Bruxelas.
Un théorème d'arithmétique en algèbre de Grassmann.

T. Evans, Univ. de Manchester.
The word problem for abstract algebras.

T. Schneider, Univ. de Göttingen.
Über die Charakterisierung der algebraischen und der rationalen funktionen durch deren funkionswerte.

A. T. Brauer, Univ. de Carolina do Norte.
On algebraic equations with all but one root in the interior of the unit circle.

D. P. Vythoulkas, Univ. Nacional de Engenharia, Atenas.
On the minimum modulus of a root of a polynomial.

W. Jacobs, Univ. George Washington.
The effect on the inverse of a change in a matrix.

W. D. Krentel, *J. C. C. McKinsey* e *W. V. Quine*, Oklahoma Agricultural and Merchanical College e Univ. de Harvard.
Information patterns for games in extensive form.

O. Helmer, The Rand Corporation.
Generalized non-zero-sum games.
M. Dresher, The Rand Corporation.
Solution of polynomial-like games.
J. Popken, Univ. de Utrecht.
Two arithmetical theorems concerning linear differential-difference equations.

Secção IV — Probabilidades e Estatística, etc.

R. C. Bose, Univ. de Carolina do Norte.
Mathematical theory of factorial designs.
B. de Finetti, Univ. de Trieste.
La nozione di «beni indipendenti» in base ai nuovi concetti per la misura della «utilità».
A. Wald e *J. Wolfowitz*, Univ. de Columbia.
Two methods of randomization in statistics and the theory of games.
H. Robbins, Univ. da Carolina do Norte.
Asymptotically sub-minimax solutions of statistical decision problems.
C. N. Mooers, Zator Company, Boston.
Information retrieval viewed as temporal signalling.
L. S. Shapley, The Rand Corporation.
Information and the formal solution of many--moved games.
J. W. Tukey, Univ. de Princeton.
Estimation in the alternative family of distributions.

Secção V — Física Matemática, etc.

F. Rellich, Univ. de Göttingen.
Störungstheorie der Spektralzerlegung.
R. V. Churchill, Univ. de Michigan.
A modified equation of diffusion.
S. Goldstein, Univ. de Manchester.
On diffusion by discontinuous movements, and on the telegraph equation.
M. S. Klamkin, Instituto Politécnico Brooklyn.
A moving boundary filtration problem or «The Cigarette Problem».
A. J. Mc Connell, Trinity College, Dublin.
The hypercircle method of approximation to the solution of a general class of boundary-value problems.
H. Poritsky e *H. Weil*, General Electric Company.
Electromagnetic measurements of the flow velocity of a fluid in a pipe of elliptical cross section.
H. Ruderfer, Laboratório de Artilharia Naval.
The solution of Laplace's equation for regular polygonal regions with a given boundary condition.
S A Schelkunoff, Bell Telephone Laboratory.
Biconical antennas of arbitrary angle.
W. C. Taylor, Univ. de Cincinnati e Aberdeen Proving Grounds.
Formal solutions of an integro-differential equation for multiply scattered radiation.

Conferência sobre Análise — Análise e Geometria Globais

J. Leray, Colégio de França.
La théorie des points fixes et ses applications en Analyse.
G. de Rham, Univ. de Gnebre e Univ. de Lausana.
Harmonic integrals and the theory of intersections.
A Lichnerowicz, Univ. de Paris.
Curvature and Betti numbers.

Setembro, 2.

Conferência sobre Topologia — Feixes fibrosos e obstrucções

P. Olum, Institute for Advanced Study.
Theory of obstructions.
W. S. Massey, Univ. de Princeton.
Homotopy groups of triads.
G. Hirsch, Univ. de Bruxelas.
Homology invariants and fiber spaces.

Secção I — Álgebra e Teoria dos Números

K. Mahler, Univ. de Manchester.
Farey sections in the fields of Gauss and Eisenstein.
K. Iwasawa, Univ. de Tokyo.
A note on L-functions.
O. T. Todd, National Bureau of Standards.
Classes of matrices and quadratic fields.
M. Ward, California Institute of Technology.
Arithmetical properties of lemniscate polynomials.
M. Gut, Univ. de Zurique.
Die bedeutung der Euler'schen Zahlen für den grossen Fermat'schen Satz und für die Klassenanzahl des Körpers der 41-ten Einheitswurzeln.
H. Heilbronn, Univ. de Bristol.
On the divisibility by three of the class-number of quadratic fields.
S. Chowla e *A. B. Showalter*, Univ. de Kansas.
On the solutions of $h(d)=1$.
H. Davenport, University College, Londres.
Binary cubic forms.
H. S. M. Coxeter, Univ. de Toronto.
Extreme forms.

L. Tornheim, Univ. de Michigan.
The extreme smoothed octagon.

H. Cohn, Wayne University.
A periodic algorithm for cubic forms.

Secção II — Análise

M. Brelot, Univ. de Grenoble.
Sur l'évolution du problème de Dirichlet.

A. Edrei, Univ. de Saskatchewan.
On mappings of a uniform space onto itself.

J. M. G. Fell e *J. L. Kelley*, Univ. de Califórnia.
On commutative self-adjoint operator algebras.

C. Goffman, Univ. de Oklahoma.
Lusin's theorem for one to one measurable transformations.

J. P. La Salle, Univ. de Notre Dame.
Successive upper and lower approximations.

E. R. Lorch, Univ. de Columbia.
Differentiable inequalities, convexity and mixed volumes.

J. L. Massera, Univ. de Montevideu.
Conditional stability of a homeomorphism in the neighborhood of a fixed point.

L. Nachbin, Univ. de Chicago.
On the continuity of positive linear transformations.

M. H. Stone, Univ. de Chicago.
The spectrum and the operational calculus for a family of operators.

J. L. Kelley e *R. L. Vaught*, Univ. de Califórnia.
A note on Banach algebras.

J. W. T. Youngs, Indiana University and the Rand Corporation.
Surface area and homotopy.

A. Douglis, California Institute of Technology.
An extremum principle for solutions of a class of elliptic systems of differential equations with continuous coefficients.

L. Van Hove, Institute for Advanced Study.
A set of unitary representations of the group of contact transformations.

H. Wielandt, Univ. de Mainz.
Über die Eigenwertaufgaben mit reellen diskreten Eigenwerten.

A. Wilansky, Lehigh University.
Summability matrices coincident with regular matrices, Banach space methods.

F. Wolf, Univ. de Califórnia.
Perturbation of analytic operators.

R. H. Cameron e *R. E. Graves*, Univ. de Minnesota.
Additive functionals on a space of continuous functions.

S. P. Diliberto e *E. G. Straus*, Univ. de Califórnia e Univ. de Califórnia em Los Angeles.
On approximating to functions of several variables by functions of fewer variables.

R. B. Leipnik, Institute for Advanced Study.
Axiomatic Perron inversion.

A. Papoulis, Univ. de Pensilvânia.
On the strong differentiation of the indefinite integral.

A. Denjoy, Univ. de Paris.
Les permutations clivées.

D. B. Goodner, Univ. do Estado da Flórida.
A note on separable normed linear spaces.

G. Kurepa, Univ. de Zagreb.
Sur les ensembles partiellement ordonnés.

W. D. Berg e *O. M. Nikodym*, Kenyon College.
On convex sets in linear spaces.

Secção IV — Probabilidades e Estatística, etc.

P. Lévy, Escola Politécnica de Paris.
Processus laplaciens et équations différentielles stochastiques.

K. L. Chung, Univ. Cornell.
An ergodic theorem for stationary Markov chains with a countable number of states.

K. Yosida, Univ. de Nagoya.
Stochastic processes built from flows.

M. Rosenblatt, Univ. Cornell.
On a class of two-dimensional Markov processes.

H. Bergstrom, Chalmers University of Technology, Gothenburg.
On asymptotical expansions of probability functions.

W. R. Wasow, National Bureau of Standards.
On the mean duration or random walks in n dimensions.

B. O. Koopman, Univ. de Columbia.
Improbable events in general stationary-transition Markoff chains.

Secção V — Física Matemática, etc.

D. C. Drucker e *W. Prager*, Univ. Brown, e *H. J. Greenberg*, Carnegie Institute of Technology.
On the pressing of a rigid stamp into an elastic-plastic body in plane strain.

D. Graffi, Univ. de Bolonha.
Su alcuni questioni di elasticità ereditaria.

G. H. Handelman e *A. E. Heins*, Carnegie Institute of Technology.
Remarks on the direct integration of the equations of elasticity.

P. G. Hodge, Jr., Univ. da Califórnia em Los Angeles.
The method of characteristics applied to problems of steady motion in plane plastic stress.

W. S. Jardetsky, Colégio Manhattan.
The problem of Atlantis.

E. H. Lee, Univ. Brown
The analysis of plastic flow in plane strain with large strains.

W. W. Leutert, Univ. de Maryland.
The heavy sphere supported by a concentrated force.

S. Moriguti, Univ. de Tóquio.
Some remarks on the method of solving two--dimensional elastic problems.

A. W. Saenz, Naval Research Laboratory, and *P. F. Neményi*, Univ. de Maryland.
On the geometry of two-dimensional elastic stress systems.

A. Signorini, Univ. de Roma.
A simple case of «incompatibility» between linear elasticity and the theory of finite deformations.

C. P. Wells, Colégio Estado Michigam, e *R. A. Beth*, Western Reserve University.
A new approach to cantilever-strut problems.

Conferência sobre Algebra — Teoria das Estruturas dos Anéis e Algebras

A. A. Albert, Univ. de Chicago.
Power-associative algebras. (Alocução a convite da Comissão Organizadora).

R. Brauer, Univ. de Michigan.
On the representations of groups of finite order.

N. Jacobson, Univ. Yale.
Representation theory of Jordan Rings.

J. Dieudonné, Univ. de Nancy.
Minimal ideals.

T. Nakayama, Univ. Nagoya
Two topics in the structural theory of rings.

Conferência sobre Matemáticas Aplicadas — Processos aleatórios em Física e Comunicações

C. E. Shannon, Bell Telephone Laboratories.
Some topics in information teory.

S. M. Ulam, Laboratório Científico de Los Alamos.
Random transformations and processes.

Secção II — Análise

H. Bohr, Univ. de Copenhague.
A survey of the different proofs of the main theorems in the theory of almost periodic functions.

E. Lahaye, Univ. de Bruxelas.
Sur le principe des itérations intégrales convergentes.

W. Magnus, Instituto de Tecnologia de California.
On a class of bounded matrices.

M. Owchar, Univ. of Minnesota.
Wiener integrals of multiple variations.

J. Chazy, Univ. de Paris.
La solution du problème des trois corps par Sundman, et ses conséquences.

G. Fichera, Univ. de Roma.
Methods for solving linear functional equations, developed by the Italian Institut for the Applications of Calculus.

R. N. Haskell, Univ. de Texas.
Sub-biharmonic functions.

E. Hopf, Univ. de Indiana.
On the initial value problem for the Navier--Stokes equations.

M. Janet, Univ. de Paris.
Equations semi-canoniques.

V. Wolontis, Univ. de Kansas.
The change of resistance under circular symmetrization.

J. Elliott, Univ. Cornell
Some singular integral equations of the Cauchy type.

S. Mandelbrojt, Rice Institute e Collège de France.
Théorèmes d'unicité de la théorie des fonctions.

M. L. Cartwright e *E. F. Collingwood*, Univ. Cambridge e Alnwick, Inglaterra.
Boundary theorems for functions meromorphic in the unit circle.

H. Milloux, Faculdade de Ciências, Bordeus.
Fonctions méromorphes et dérivées.

G. Valiron, Univ. de Paris.
Fonctions méromorphes d'ordre nul.

B. Epstein e *J. Lehner*, Univ. de Pennsylvania.
On Ritt's representation of analytic functions as infinite products.

F. Herzog e *G. Piranian*, Colégio Estado Michigan e Univ. de Michigan.
Schlict gap series whose convergence on the unit circle is uniform but not absolute.

A. W. Goodman e *M. S. Robertson*, Univ. de Kentucky e Univ. Rutgers.
A class of multivalent functions.

O. Lehto, Univ. de Helsínquia.
On the boundary behavior of analytic functions.

G. R. Maclane, Rice Institute.
Riemann surfaces and asymptotic values associated with certain real entire functions.

Z. Nehari, Washington University.
Some extremal problems involving single-valued analytic functions.

J L Walsh, Harvard University.
On Rouché's theorem and the integral-square measure of approximation.

Secção III — Geometria e Topologia

P. O. Bell, Univ. de Kansas.
A new approach to the study of the projective differential geometry of surfaces.

A. Fialkow, Instituto Politécnico Brooklyn.
A correspondence principle in conformal geometry.

P. Hartman, Univ. John Hopkins.
On the uniqueness of geodesics.

V. Hlavaty, Indiana University.
Spinor space and line geometry.

S. B. Jackson, Univ. de Maryland.
Angular measure and the Gauss-Bonnet formula.

A Kawaguchi, Hokkaido University.
Theory of connection in an areal space.

C. C. MacDuffee, Univ. de Wisconsin.
Curves in Minkowski space.

S. B. Myers, Univ. de Michigan.
Curvature of closed hypersurfaces.

N. Sakellariou, Univ. de Atenas.
Über Strahlensysteme deren abwickelbaren Flächen eine Fläche unter geodätischen Linien und ihren geodätischen Parallelen schneiden.

J. L. Vanderslice, Univ. de Maryland.
Non-linear displacements in affine-connected space.

P. Vincensini, Univ. de Marselha.
Sur certains réseaux tracés sur une surface et leur rôle en géométrie différentielle.

M. C. Wicht, Louisiana State University.
A foundation for Riemannian geometry.

K. Yano, Univ. de Tóquio.
Affine and projective geometries of systems of hypersurfaces.

Secção VII — História e Educação

G. Polya, Stanford University.
On plausible reasoning.

H. Eves, Oregon State College.
A problem set for a course in «History of Elementary Mathematics».

E. Rossing, Tonder Statsskole, Tonder, Dinamarca.
The teaching of mathematics in Denmark.

K. May e *K. Mc Voy*, Carleton College.
Simplification of rigorous limit proofs.

O. E. Overn, State Teachers College, Milwaukee.
Current trends in the teaching of plane trigonometry.

H. P. Fawcett, Ohio State University.
Unifying concepts in mathematics.

M. S. Kramer, New Mexico State College.
The introduction of applied problems for the enrichment of classroom instruction in the schools and colleges.

F. Denk, Erlangen, Alemanha.
Über die Lehrbarkeit des Erfindens in der Mathematik.

F. L. Griffin, Reed College.
Further experience with undergraduate mathematical research.

Setembro, 4.

Secção I — Algebra e Teoria dos Números

A. Selberg, Institute for Advanced Study.
The general sieve method and its place in prime-number theory.

D. H. Lehmer, Univ. de Califórnia.
Problems concerning Ramanujan's function.

G. Pall, Illinois Institute of Technology.
A «reciprocity law» for quaternions.

D. Shanks, Naval Ordnance Laboratory.
On the density of reducible integers and some sequences associated with them.

I. Niven, Univ. de Oregon.
Sets of integers of density zero.

M. Hall, Jr., e *H. J. Ryser*, Ohio State University.
Cyclic incidence matrices.

S. Chowla e *A. L. Whiteman*, Univ. de Kansas e Univ. da Carolina do Sul.
On exponential and character sums.

A. A. K. Ayyangar, Andhra University, Waltair, India.
On positive integers admitting a particular type of partition into unequal parts.

W. Ljunggren, Univ. de Bergen.
On the integral solutions of the diophantine system $ax^2-by^2=c$, $a_1 z^2-b_1 y^2=c_1$.

L. V. Toralballa, Marquette University.
A generalization of finite integration.

N. C. Scholomiti, Univ. de Illinois.
Expansion of discontinuous functions. Applications to the theory of numbers.

A. A. Trypanis, Univ. Técnica Nacional, Atenas.
On Fermat's last theorem.

Secção II — Análise

L. Carleson, Univ. de Upsala.
On a class of meromorphic functions.

G. Springer, Massachusetts Institute of Technology.
The coefficient problem for Schlicht mappings of the exterior of the unit circle.

N. Terzioglu, Univ. de Estambul.
Über der Verzerrungssatz von Koebe.

L. R. Ford, Illinois Institute of Technology.
Fundamental regions for discontinuous groups of linear transformations.

E. Jabotinsky, Jerusalém, Israel.
Representation of functions by matrices and by integral transforms.

B. Lepson, Institute for Advanced Study.
On irregular points of normal convergence and M-convergence for series of analytic functions.

S. Rosen, Drexel Institute of Technology.
Modular transformation of certain series.

L. Sario, Harvard University.
On open Riemann surfaces.

O. Szasz e *N. Yeardley*, Univ. de Cincinnati e Purdue University.
Representation of an analytic function by general Laguerre series.

F. G. Tricomi, Univ. de Turim.
On the incomplete gamma function.

S. E. Warschawsky, Univ. de Minnesota.
On the effective determination of the mapping function in conformal mapping.

E. Hewitt e *H. S. Zuckermann*, Univ. de Washington.
On convolution algebras.

G. Racah, Univ. Hebraica, Jerusalém.
On the characterization of the rows and columns of the representations of the semi-simple Lie groups.

R. K. Ritt, Univ. de Michigan.
Algebraic functions in an abelian normed ring.

I. J. Schoenberg, Univ. de Pensylvania.
On the number of variations of signs in a sequence of linear forms.

S. Sherman, Institute for Advanced study.
The second adjoint of a C* algebra.

O. M. Nikodym, Kenton College.
On extension of measure.

J. Kampé de Fériet, Univ. de Lille.
Sur l'analyse harmonique des fonctions à carré moyen fini.

N. J. Fine, Univ. de Pennsylvania.
On the asymptotic distribution of certain sums.

E. Hille, Univ. de Yale.
«Explosive» solutions of Fokker-Planck's equation.

S. Kakutani, Univ. de Yale.
Brownian motion and duality of locally compact abelian groups.

H. Rubin, Univ. de Stanford.
An elementary treatment of uniqueness for the Hamburger moment problem.

A. Sard, Queens College.
Least square error and variance.

Secção III — Geometria e Topologia

A. L. Blakers, Lehigh University.
A generalization of the Hurewicz isomorphism theorem.

R. E. Chamberlin, Univ. de Utah.
On the mappings of a 4-complex into certain simply connected spaces.

B. Eckmann, Escola Politécnica Federal, Zürich.
Räume mit Mittelabbildungen.

S. T. Hu, Tulane University.
The equivalence of fibre bundles.

J. Leray, Colégio de França.
L'emploi, en topologie algébrique, du formalisme du calcul différentiel extérieur.

E. Pitcher, Lehigh University e Institute for Advanced Study.
Homotopy groups of the space of curves with application to spheres.

S. S. Chern e *E. H. Spanier*, Univ. de Chicago.
Transgression and the homology structure of fiber bundles.

N. E. Steenrod, Univ. de Princeton
Reduced powers of a cocycle.

R. L. Wilder, Univ. de Michigan.
A generalization of a theorem of Pontrjagin.

Secção IV — Probabilidades e Estatística, etc.

S. N. Roy, Univ. da Carolina do Norte.
On some aspects of statistical inference.

S. G. Ghurye, Institute of Statistics, Chapel Hill.
Maximum-likelihood estimation in linear stochastic difference equations.

A. C. Cohen, Jr., Univ. de Georgia.
Estimating parameters of logorithmic-normal distributions by the method of maximum likelihood

Z. W. Birnbaum, Univ. de Washington.
Sampling from populations with overlapping strata.

P. R. Rider, Washington University.
The distribution of ranges in samples from a discrete rectangular population.

A. W. Marshall e *J. E. Walsh*, The Rand Corporation.
Some tests for comparing percentage points of two arbitrary continuous populations.

Secção V — Física Matemática, etc.

G. Borg, Instituto de Matemática, Uppsala.
An inversion formula.

P. Brock, Reeves Instrument Corporation, New York.
The nature of solutions of a Rayleigh type forced vibration equation with large coefficient of damping.

F. H. Brownell, Univ. de Washington.
Asymptotically ergodic output under ergodic input of delay differential machines.

R. M. Foster, Instituto Politécnico de Brooklyn.
The number of series-parallel networks.

M. Goldberg, Bureau of Ordnance, Navy Department.
Rotors in spherical polygons.

R. Kahal, Instituto Politécnico de Brooklyn.
The realization of the transfer fonction of the finite, fourterminal network.

E. Leimanis, Univ. da Columbia Britânica.
Some new cases of integration of differential equations of exterior ballistics by quadratures.

A. Rapoport e *R. Solomonoff*, Univ. de Chicago.
Structure of random nets.

R. M. Rosenberg, Univ. de Washington.
A note on the response of systems with or without non-linear elements.

A. W. Saenz, Washington, D. C.
On integrals of motion of the Runge type in classical and quantum mechanics.

J. J. Smith e *P. L. Alger*, General Electric Company.
The use of the null-unit function in generalized integration.

Secção IV — Lógica e Filosofia

A. Tarski, Univ. de California.
Some notions and methods on the borderline of algebra and metamathematics.

A. Robinson, Colégio de Aeronautica, Cranfield, U. K.
Applied symbolic logic.

J. Robinson, Berkeley, California.
Existential definability in arithmetic.

J. Rosenbaum, Univ. de Miami.
A logistic proof of a theorem related to Landau's Theorem 4.

E. R. Stabler, Hofstra College.
Applied logic and modern problems.

A. C. Sugar, University of Southern California.
Axioms for the kinematics of a particle in absolute space and time.

Conferência sôbre Análise — Tendências algébricas em Análise

Debate sobre representações de grupos

Participantes:

H. Cartan, da Sorbonne.
A. M. Gleason, Univ. Harvard.
R. Godement, Univ. de Nancy.
G. W. Mackey, Univ. de Harvard.
F. I. Mautner, Instituto de Tecnologia de Massachusetts.
L. Schwartz, Univ. de Nancy.

Orador:

R. Godement

Debate sobre Algebra Topológica

Participantes:

J. Dieudonné, Univ. de Nancy.
I. Kaplansky, Univ. de Chicago.
I. E. Segal, Univ. de Chicago.

Orador:

I. Kaplansky

Debate sobre Teoria da Medida

Participantes:

J. Dieudonné, Univ. de Nancy.
P. R. Almos, Univ. de Chicago.
J. C. Oxtoby, Bryn Mawr College.
D. M. Stone, Univ. de Manchester.
S. M. Ulam, Los Alamos Scientific Laboratory.

Orador:

P. R. Halmos

Conferência sobre Matemáticas Aplicadas. Equações às derivadas parciais

J. v. Neumann, Institute for Advanced Study.
Shock interaction and its mathematical aspects. (Alocução a convite da Comissão Organisadora).

R. Courant, New York University.
Boundary value problems in modern fluid dynamics.

S. Goldstein, Univ. de Manchester.
Selected problems from gas dynamics.

W. Heisenberg, Max Planck Institute of Phisics, Göttingem.
Die Stabilitätsfragen der Flüssigkeitsdynamik im Zusammenhang mit der statistischen Turbulenztheorie.

W .Prager, Brown University.
Mathematical theory of water waves.
J. J. Stoker, New York University
Mattematical theory of water waves.

Secção I — Álgebra e Teoria dos Números

W.Givens, Univ. de Tennessee.
Some properties of the Dieudonné determinant.
R. D. Schafer, Univ. de Pennsylvania.
A theorem on the desivations of Jordan algebras.
A. J.Penico, Tufts College.
On the structure of standard algebras.
T. Nakayama, Nagoya University.
On the theory of Galois algebras.
Th. H. Le Page, Univ. de Bruxelas.
Ideaux homogènes de l'algèbre extérieure.
J. Levitzki, The Hebrew Uuiversity, Jerusalém.
On the algebraic elements of a ring with operators.
R. H. Bruck, Univ. de Wisconsin.
On the associativity theorems for alternative rings and Moufang loops.
M. F. Smiley, State University of Iowa.
Topological alternative rings.
S. Bourne, Institute for Advanced Study.
Th Jacobson radical of a semiring.
P. Abellanas, Univ. de Madrid.
Variété fondamentale par rapport d'une correspondance algébrique.

Secção II — Análise

A. Gelbart, Syracuse University.
An extension of the Riemann mapping theorem associeted with minimal surfaces.
E. Ullrich, Univ. de Giessen.
Zum Krümmungsverhalten der Betragflächen analytischer Funktionen.
I. A. Barnett, Univ. de Cincinnati.
Functional invariants of integro-differential equations.
E. Pinney, Univ. de Califórnia.
A system of functional equations.
M. G. Arsove. Brown University.
Functions representable as differences of subharmonic functions.
M. Fekete, Universidade Hebraica, Jerusalém.
On transfinite radius.
H Schmidt, Technische Hochschule, Braunschwieig.
Über Nullgebilde analytischer, Funktionen zweier Veränderlicher, die in singulären Punkten münden.

Secção III — Geometria e Topologia

B. Segre, Univ. de Bolonha.
Arithmetical properties of algebraic varieties.
A. Andreotti, Univ. de Roma.
Sopra alcune superficie algebriche.
I. Barsotti, Univ. de Pittsburgh.
Algebraic theory of intersections for cycles of an algebraic variety.
F. Gaeta, Instituto de Alta Matemática, Roma.
Sull'ideale omogeneo appartenente ad un gruppo di N punti generici del piano.
W. R. Hutcherson, Univ. de Florida.
Imperfect point on invariant space curves.
E. Kasner, Univ. de Columbia.
The converse of the theorem of Mehmke-Segre.
T. H. Motzkin, Universidade Hebraica, Jerusalém.
Duality and neighbor points.
J. F. Nasch, Jr., Univ. de Princeton.
Algebraic approximations to manifolds.
E. J. Purcell, Univ. de Arizona.
A series of non-involutorial Cremona transformations in [n].
A. M. Terracini, Univ. de Turim.
Direttrici congiunte e bicongiunte di una rigata.

Setembro, 5

Alocuções

A. Wald, Univ. de Columbia.
Basic ideas of a general theory of statistical decision rules.
H. Whitney, Univ. de Havard.
r-dimensional integration in n-space.
H. V. D. Hodge, Univ. de Cambridge.
Topological invariants of algebraic varieties.
J. F. Ritt, Univ. de Columbia.
Differential groups.
H. Davenport, University College, Londres.
Recent work in the geometry of numbers.
L. Schwartz, Univ. de Nancy.
Distributions and principal aplications.
(Alocuções a convite da Comissão Organizadora)

Conferência sobre Álgebra — Álgebra Aritmética

E. Artin, Univ. de Princeton.
Modern development of algebraic number theory and class field theory.
W. Krull, Univ. de Bonn.
Jacobsonches radikal, Hilbertscher nulletellensatz, dimensions theorie.
M. Deuring, Univ. de Göttingen.
Singularities of commutative rings.

M. Krasner, Centre National de le Recherche Sientifique, Paris.
Essai d'une théorie-non abelienne des corps de classes.

Conferência sobre Análise — Tendências algébricas em Análise

Debate sobre teoria espectral

Participantes:

W. Ambrose, Massachusetts Institute of Technology.
J. Dixmier, Faculdade de Ciências, Dijon.
N. Dunford, Yale University.
F. J. Murray, Columbia University.
J. v. Neumann, Institute for Advanced Study.
F. Rellich, Univ. de Göttingen.
B. de Sz. Nagy, Univ. de Szeged.
K. Yosida, Nagoya University.

Orador:

N. Dunford

Debate sobre análise funcional aplicada

Participantes:

N. Aronzajn, Oklahoma Agricultural andM echanical College.
S. Bergman, Harvard University.
J. W. Calkin, Rice Institute.
K. Friedaichs, New York University.
K. Kodaira, Univ. de Tóquio.
A Weinstein, University of Maryland.

Orador:

N. Aronszajn

Debate sobre teoria ergódica

Participantes:

N. Dunford, Yale University.
W. Eberlein, Univ. de Wisconsin.
G. A. Hedlund, Yale University.
E. Hille, Yale University.
S. Kakutani, Yale University.
J. C. Oxtoby, Bryin Mawr College.

Orador:

S. Kakutany
Ergodic Theory.
(Alocução a convite da Comissão Organisadora).

Conferência sobre Topologia — Variedades diferenciáveis

S. S. Chern, Univ. de Chicago.
Differentiable geometry of fiber bundles.
(Alocução a convite da Comissão Organisadora).

E. Ehresmann, Univ. de Strasbourg.
Almost complex manifolds.

B. Eckmann, Escola Politécnica Federal, Zürich.
Topologie der komplexen Mannigfaltigkeiten.

C. B. Allendoerfer, Haverford College.
Cohomology on real differentiable manifolds.

Secção V — Física Matemática, etc.

R. H. Battin, Massachusetts Instiute of Technology.
On the stability of the boundary layer over a body of revolution.

R. Berker, Univ. Técnica de Istambul.
Sur l'écoulement d'un fluide visqueux autour d'un obstacle.

A. Ghaffari, Univ. de Teerão.
Simple waves in two-dimensional compressible flow.

C. C. Lin, Instituto de Tecnologia de Massachusetts.
On the stability of zonal winds over a rotating spherical earth.

L. Millsaps, Instituto Politécnico de Alabama e *K. Pohlhausen*, Office of Air Research, Dayton, Ohio.
The kinetic structure of plane shock waves.

H. Poritsky, General Electric Company.
The collapse or growth of a spherical bubble or cavity in a viscous fluid.

R. Sauer, Technische Hochschule München.
Linearisierte Überschallströmung um langsam schwingende Drehkörper.

B. R. Seth, Iowa State College e Hindu College, Delhi, India.
Synthetic method for non-linear problems.

S. S. Shü, Instituto de Tecnologia de Illinois.
On the solution in the large of a Cauchy problem (with special references to the compressible flow after a stationary shock).

K. M. Siegel, Univ. de Michigan.
An exact solution to the non-linear differential equation discribing the passage of plane waves of sound through air.

F. L. Alt, National Bureau of Standards.
Almost-triangular matrices.

G. R. Boulanger, Faculdade Politécnica de Mons e Univ. de Bruxelas.
New advance in the structural study of multiplane nomograms.

H. Bückner, Minden, Alemanha.
Remarks on an algebraic method for numerically solving the Fredholm integral equation $y-\lambda k\gamma=f$.