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**BULLETIN OF THE
INTERNATIONAL MATHEMATICAL UNION**

REPORT OF THE EXECUTIVE COMMITTEE
OF THE INTERNATIONAL MATHEMATICAL UNION
TO THE NATIONAL ADHERING ORGANIZATIONS

1 January — 31 December 1965

A. Membership.

The following 41 countries were members of the Union in 1965:

- Group I: Argentina, Australia, Brazil, Bulgaria, China-Taiwan, Cuba, Greece, East Germany, Iceland, Ireland, Malaya-Singapore, Mexico, North Korea, Norway, Portugal, South Africa, Turkey;
- Group II: Austria, Denmark, Finland, Israel, Pakistan, Rumania, Spain, Sweden, Yugoslavia;
- Group III: Belgium, Canada, Czechoslovakia, Hungary, India, the Netherlands, Switzerland;
- Group IV: France, Germany, Italy, Japan, Poland;
- Group V: Great Britain, U. S. A., U. S. S. R.

This membership corresponded to a total voting strength of 91 and an annual income from membership dues of \$ 10,269.00 (equivalent to 105 units).

B. Scientific Activities.

I. Colloquia and Symposia: The following research colloquia were co-sponsored by the Union in 1965.

(i) *International Conference on the Theory of Groups, Canberra, Australia, August 10—20, 1965.*

The conference was sponsored jointly by the Union, the Australian Academy of Science and the Australian National University. There were 89 participants, 45 from outside Australia, representing 12 countries: Canada, Eire, Germany, Hungary, India, Italy, Japan, Netherlands, New Zealand, Switzerland, U. K. and U. S. A. The Union's delegates on the Organizing Committee were C. Chevalley and F. Hirzebruch. For details, see Appendix A.

(ii) *Instructional Conference on Algebraic Number Theory, Brighton (Sussex), England, September 1—18, 1965.*

The conference was organized by the London Mathematical Society, with financial assistance from the Union and NATO. There were in all 194 participants, 122 from outside Britain. For details, see Appendix B.

(iii) *International Colloquium on Analytic Functions, Erévan, USSR, September 4—16, 1965.*

The colloquium was organized by the USSR Academy of Sciences, with the cooperation of the Union. There were 86 participants, 46 from countries other than USSR, representing 11 countries. The Union's representatives on the Organizing Committee were H. Cartan and L. Hörmander. For details, see Appendix C.

(iv) *International Colloquium on Algebraic Geometry, Madrid, Spain, September 9—16, 1965.*

The colloquium was organized by the Spanish National Committee for Mathematics with the aid of the Union and the Consejo Superior de Investigaciones Científicas of Spain. The Union's representatives on the Organizing Committee were F. Hirzebruch and B. Segre. For details, see Appendix D.

(v) *International Symposium on Algebraic Geometry, Rome, Italy, September 30—October 5, 1965.*

The symposium was organized by the Guido Castelnuovo Mathematical Institute of the University of Rome on the occasion of the birth centenary of Castelnuovo, with the assistance of the Italian National Research Council, the Academy of Lincei and the Union. There were 117 participants, 44 of them from outside Italy, representing 13 countries: Austria, Belgium, Brazil, France, Germany, Great Britain, Hungary, Israel, Japan, Netherlands, Rumania, Switzerland and U.S.A. The Union's representatives on the Organizing Committee were W. V. D. Hodge and F. Hirzebruch. For details, see Appendix E.

II. Exchange Programme — IMU Lectureships.

Spain was granted an IMU Lectureship in 1965 under the Exchange Programme. Prof. *R. Deheuvels* (Paris) visited the University of Santiago and other universities in Spain from October 13—23 as IMU Lecturer, and gave several lectures on Global Properties of Differential Systems (theorems of Poincaré-Bendixson and Denjoy-Schwartz; properties of holonomy).

III. International Commission on Mathematical Instruction (ICMI).

(i) ICMI played an active part in the conference on „*Science education and economic growth*“ organized by the Inter-union Commission on the Teaching of Science (IUCTS) at Dakar (Senegal) on January 14—22, 1965. Preliminary reports prepared by various Unions were presented to the Conference by M. Minnaert (Utrecht — Astronomy), P. Chouard (Paris — Biology), G. M. Schwab (Munich — Chemistry), A. J. Frueh (Montréal — Crystallography), R. Clozier (Paris — Geography), T. N. George (Glasgow — Geology), R. Taton (Paris — History of Science), Y. Akizuki (Tokyo — Mathematics), G. Temple (Oxford — Mechanics) and S. C. Brown (Cambridge, Mass. — Physics).

- The following final reports were presented by the various working groups:
- R. Heller (Paris): „L'enseignement des Mathématiques, de la Physique et de la Chimie à l'usage des biologistes“;
- T. N. George (Glasgow): „Mathematics in the training of Geologists“;
- G. Pisot (Paris): „L'enseignement des mathématiques pour les Physiciens“;
- H. F. Fehr (New York): „Mathematics education for scientific, technological and industrial needs of Society“;
- M. Y. Bernard (Paris) (suppléé à Dakar par J. Robin): „La formation des techniciens“;
- J. G. Baer (Neuchâtel, Suisse): „Conservation and exploitation of natural resources: teaching and organisation of specialised Institutes and problems peculiar to African countries“.

The proceedings of the Conference are being published in instalments in successive issues of *L'Enseignement Mathématique*.

(ii) A regional seminar on „*Les répercussions de la recherche mathématique sur l'enseignement*“ was organized by ICMI at Echternach (Luxembourg) on May 30—June 4, 1965. Communications were represented by Professors Behnke, Breard, Steiner, Kirsch, Servais, Revuz, Pisot, Papy, Dieudonné, Pickert, Delessert, Debbaut, Choquet, de Siebenthal, Bunt and Engel. The proceedings are to be published shortly as a separate volume by the National Sub-commission of Luxembourg.

(iii) The Executive Committee of ICMI granted affiliation as a regional committee to the Inter-American Committee for Mathematical Education.

(iv) It was decided that the proposed reports to the Moscow Congress, 1966, would be communicated by:

- M. C. Pisot (Paris): Le programme de la formation mathématique universitaire du futur physicien: nécessité de cours particuliers ou non.
- M. H. G. Steiner (Münster): Emploi de la méthode axiomatique dans l'enseignement du 2^e degré.
- Mme Z. Krygowska (Krakow): Développement de l'activité mathématique des élèves. Rôle des problèmes dans ce développement.

(v) In connection with the contract entered into with UNESCO, six national reports on mathematical education are under preparation by Professors Behnke (West Germany), Mme Lelong (France), Y. Akizuki (Japan), A. G. Walker (U. K.) and A. D. Alexandroff (USSR) and E. Moise (USA). Further, the publication of a series of volumes entitled „New tendencies in mathematical education“ has been projected. These will comprise new reports, reproduction of old articles and bibliographical information. Madame Krygowska is in charge of the work.

C. Meetings of the Executive Committee.

The 20th meeting of the Executive Committee was held in Paris on April 29—30, 1965 and was attended by Professor G. de Rham (President), Professors H. Cartan and K. Kuratowski (Vice-Presidents), Professor K. Chandrasekharan (Secretary), Professors J. C. Burkill, M. Lavrentiev, D. Montgomery and B. Segre (Members).

- (i) The audited financial statement for 1964 was adopted.
- (ii) It was decided to allocate a sum not exceeding \$ 14,000.— for the International Congress of Mathematicians, Moscow, 1966.
- (iii) It was decided that the Vth General Assembly of the Union be held in Moscow on August 13—15, 1966 and that the Assembly be conducted on the same lines as at Saltsjöbaden.

- (iv) A Committee was set up to decide the location of the International Congress of Mathematicians 1970.
- (v) It was decided to appoint Professor S. Bundgaard as a replacement for Professor Stone on the Inter-Union Commission on the Teaching of Science.
- (vi) It was decided to bring out the 3rd edition of the World Directory by the time of the 1966 Congress; the Committee was informed that a definitive list from USSR for the Directory would be supplied in good time.
- (vii) It was decided to set up a Committee on Mathematical Reviewing to study ways and means of improving the present system of mathematical reviewing by mutual co-operation between the existing review journals. The Committee was to consist of Prof. F. Hirzebruch, Prof. S. MacLane and Prof. S. N. Merguelian. (Prof. MacLane, who declined an invitation to serve on the Committee was subsequently replaced by Prof. Halmos.)

D. ICSU-UNESCO.

The Executive Committee of ICSU met in Munich on April 5—7, 1965

E. Financial Report.

The Financial Report for 1965 is presented separately.

APPENDIX A

International Conference on the Theory of Groups

List of Papers

(*) denotes papers presented by title.

- L. W. Anderson and R. P. Hunter: Groups, homomorphisms and the Green relations.
- Christine W. Ayoub: On the number of conjugate classes in a group.
- R. Baer: (1) Noetherian groups
(2) Nilpotency
(3) Noetherian soluble groups.
- G. Baumslag: Finitely presented groups.
- W. Brisley: On a problem of D. W. Barnes.
- J. L. Britton: On the unrestricted Burnside problem.
- P. F. Conrad: Lateral completions of lattice-ordered groups. (*)
- A. L. S. Corner: Some recent developments in theory of torsion-free abelian groups.
- P. J. Cossey: On certain varieties of A -groups. (*)
- H. S. M. Coxeter: The Lorentz group and the group of homographies.
- W. E. Deskins: On C -permutable subgroups of finite groups.
- J. D. Dixon: Complements of normal subgroups in infinite groups.
- W. Feit: (1) Groups with a cyclic Sylow subgroup.
(2) An analogue of Jordan's theorem in characteristic p .

- L. Fuchs: On orderable groups.
- T. M. Gagen: On groups with abelian 2-Sylow subgroups.
- W. Gaschütz: Nichtabelsche p -Gruppen besitzen äußere p -Automorphismen (read in English).
- C. K. Gupta: On stability groups of certain nilpotent groups. (*)
- N. D. Gupta: Groups satisfying certain two variable laws.
- N. D. Gupta and M. F. Newman: On metabelian groups satisfying certain laws. (*)
- M. Hall, Jr.: Group theory and block designs.
- T. O. Hawkes: Analogues of system normalizers and Praefrattini subgroups.
- H. Heineken: Groups with an existence property with respect to commutators.
- D. H. W. Held: Some criteria for the hypercentrality of groups.
- G. Higman: (1) The orders of finite relatively free groups.
(2) Representations of general linear groups and varieties of p -groups.
- K. A. Hirsch: Periodic linear groups.
- R. P. Hunter and L. W. Anderson: Certain groups and homomorphisms associated with a semi-group.
- N. Ito: (1) On transitive permutation groups of Fermat prime degree.
(2) Two questions on projective planes and block design.
- D. G. James: On the orthogonal group of ramified lattices over local fields.
- Z. Janko: A characterization of a new simple group.
- J. A. Kalman: An intrinsic multiplication in additive l -groups. (*)
- O. H. Kegel: On Huppert's characterization of supersoluble groups.
- L. G. Kovacs: Varieties and the Hall-Higman paper. (*)
- L. G. Kovacs and M. F. Newman: Just-non-Cross varieties. (*)
- F. Loonstra: Ordering of (abelian) extensions of (abelian) groups.
- P. J. Lorimer: Subplanes of projective planes.
- I. D. Macdonald: A theorem about varieties of groups.
- Hanna Neumann: Varieties of groups.
- Sheila Oates: Identical relations in a small number of variables.
- Sophie Piccard: Quelques problèmes généraux de structure de groupes et la théorie des groupes libres modulo n (read in English).
- K. M. Rangaswamy: Abelian groups with endomorphic images of special types.
- R. Ree: Classification of involutions and centralizers of involutions in certain semi-simple groups.
- J. S. Rose: Remarks on system normalizers and Carter subgroups.
- H. Schwerdtfeger: Group theoretical interpretation of projective incidence theorems.
- R. Steinberg: On the Galois cohomology of linear algebraic groups.
- A. G. R. Stewart: On the class of certain nilpotent groups. (*)
- G. Szekeres: Finite metabelian p -groups with two generators.
- O. Tamaschke: A generalized character theory on finite groups.
- G. E. Wall: On Hughes' H_p -problem.
- M. A. Ward: (1) Basic commutators.
(2) Nilpotent free groups with torsion-free central factor groups.
- P. M. Weichsel: Critical and basic p -groups.
- K. W. Weston: On a useful theorem for commutator calculation and the theory of associative rings.
- H. Wielandt: (1) On the structure of composite groups.
(2) On automorphisms of doubly transitive permutation groups.
- G. Zappa: Sur les S -partitions de Hall dans les groupes finis résolubles.

APPENDIX B

Instructional Conference on Algebraic Number Theory

Scientific Programme

- A. Introductory Courses.* (Number of lectures in brackets)
Cohomology theory of groups — *Atiyah-Wall* (8)
Local fields — *Fröhlich* (8)
Global fields — *Cassels* (8)
Profinite groups — *Gruenberg* (2)
Cyclotomic fields — *Birch* (1)
Kummer fields — *Birch* (1)
- B. Advanced Courses.*
Local class field theory — *Serre* (7)
Global class field theory — *Tate* (7)
L-functions — *Heilbronn* (3)
Algebraic groups — *Kneser* (3)
History of class field theory — *Hasse* (2)
Applications of computers to class field theory — *Swinerton-Dyer* (2)
The class field tower — *Roquette* (1)
- C. Supplementary lectures and seminars.* (* indicates survey talks)
Report on some recent work of Mahler — *Cassels*
Conductors — *Fröhlich*
**l*-extensions — *Hoechsmann*
Multiplicative quadratic forms — *Pfister*
Irreducibility of polynomials — *Schinzel*
*Complex multiplication — *Serre*
*Cohomology with finite coefficient group — *Tate*
Problems on Hermitian forms — *Wall*

APPENDIX C

International Colloquium on the Theory of Analytic Functions

Scientific Programme

1. A. L. Šaguinyan (USSR): On some problems of the theory of approximation.
2. A. Denjoy (France): Sur une fonction de variable complexe rattachée au développement des nombres réels en fraction continue.
3. W. K. Hayman (England): On the spherical derivative.
4. R. Nevanlinna (Finland): Remark on some principles in the Theory of functions.
5. M. Džrbasyan (USSR): Classes of analytic and subharmonic functions and their representation.
6. L. Bers (USA): Some recent results in the theory of Riemann surfaces and discontinuous groups.
7. J.-P. Kahane (France): Séries de Taylor aléatoires.
8. L. Gårding (Sweden): Uniformization of the solutions of Cauchy's problem for holomorphic differential equations with linear principal part.
9. M. F. Atiyah (England): A Lefschetz fixed-point formula for holomorphic mappings.
10. Ch. Pommerenke (DBR): Conformal mapping and extremal points.

11. M. Brelot (France): Quelques relations entre la théorie moderne du potentiel et les fonctions analytiques.
12. A. A. Goncar, S. N. Mergelyan (USSR): On uniform approximation of analytic and harmonic functions.
13. J. Wermer (USA): Dirichlet Algebras.
14. S. Mandelbrojt (France): Considérations arithmétiques dans l'analyse harmonique.
15. I. M. Fel'fand, A. A. Kirillov (USSR): On fields connected with enveloping algebras of Lie algebras.
16. F. W. Gehring (USA): Coefficients of quasiconformality of domains in three spaces.
17. I. E. Bazilevič (USSR): On the dispersion of the coefficients of schlicht functions.
18. P. P. Kufarev (USSR): On a method of investigation of extremal problems for certain classes of functions univalent in a half-plane.
19. O. Tammi (Finland): The fourth coefficient of bounded univalent functions.
20. R. A. Aleksandryan (USSR): Method of complex perturbation in the theory of spectral decomposition of arbitrary selfadjoint operators into characteristic functionals.
21. A. V. Bitsadze (USSR): Normally solvable elliptic boundary problems.
22. J. J. Kohn (USA): Non-homogeneous Cauchy-Riemann equations.
23. A. A. Talalyan (USSR): Theorems of representation and uniqueness in the theory of orthogonal series.
24. A. F. Leont'ev (USSR): On the representation of arbitrary analytic functions by means of Dirichlet series and certain more general series.
25. G. L. Lunts (USSR): Stability of certain theorems on the singularities of Dirichlet series.
26. O. D. Tsereteli (USSR): Remarks on a theorem of Zygmunds.
27. A. Douady (France): Sur le problème des modules pour les sous-espaces compacts d'un espace analytique donné.
28. Yu. V. Linnik (USSR): Applications of certain theorems of H. Cartan to mathematical statistics.
29. A. Oniščik (USSR): On deformations of holomorphic fibered spaces.
30. A. Tyurin (USSR): Vector fiberings over a Riemann surface.
31. E. Z. Collingwood (England): Tsuji functions with Julia points.
32. E. P. Dolženko (USSR): Differentiability of analytic and harmonic functions at boundary points of the domain.
33. Ch. Loewner (USA): On the boundary behaviour of schlicht functions.
34. V. M. Gavrillov (USSR): On certain classes of meromorphic functions, characterized by the spherical derivation.
35. E. M. Kegeyan (USSR): On the boundary behaviour of analytic functions, given in a circle.
36. A. Pfluger (Switzerland): Riemannsche Flächen vom hyperbolischen Typus, erzeugt durch Asymmetrien.
37. S. Bergman (USA): On the distortion of an invariant metric under homeomorphism.
38. B. A. Fuks (USSR): On the Ricci curvature of the Bergman metric, invariant with respect to biholomorphic mappings.
39. R. Finn (USA): On normal metrics, and Cohn-Vossen's curvature bound.
40. N. N. Meiman (USSR): Certain applications of the theory of functions to quantum field theory.
41. K. Hoffman (USA): Bounded analytic functions in the unit disc.
42. H. Royden (USA): Algebras of bounded analytic functions on open Riemann surfaces.

43. A. L. Shields (USA): Weak topologies for the bounded analytic functions.
44. N. S. Landkof (USSR): On a theorem of W. Rudin.
45. Ya. Fuka (Czechoslovakia): Remarks on the maximality of certain function algebras.
46. B. Moišezon (USSR): n -dimensional compact Kähler manifolds with n algebraically independent functions.
47. R. Narasimhan (India): A remark on families of Stein manifolds and the Levi problem.
48. L. I. Volkovisskii (USSR): Certain questions in the theory of analytic functions on Riemann surfaces and complex manifolds.
49. B. Venkov (USSR): On simply connected analytic surfaces.
50. A. Paršin (USSR): A non-commutative generalization of Jacobi manifolds.
51. W. H. Fuchs (USA): On the growth of meromorphic functions of order less than one with two deficient values.
52. I. O. Hačatryan (USSR): Representation of meromorphic functions of infinite order in a half plane.
53. A. G. Naftalevič (USSR): Generalization of a theorem of Hermite.
54. Yu. E. Alenitsin (USSR): On univalent functions without common values in multiply-connected domains.
55. A. Steiner (Switzerland): Eine Verallgemeinerung des Satzes von Paley und Wiener.
56. M. M. Lavrentiev (USSR): On certain questions of the constructive theory of generalized analytic functions.
57. A. B. Šabat (USSR): Analog of the theorem of Rado-Cartan for the solutions of elliptic equations.
58. E. D. Solomentsev (USSR): The basic formula of Green and theorems of Phragmen-Lindelöf type for harmonic functions in three-dimensional domains.
59. N. U. Araklyan (USSR): On certain questions of the theory of uniform approximation by means of entire functions.
60. B. Mityagin (USSR): Approximation of positive entire functions by polynomials.
61. L. Iliev (Bulgaria): Entire functions of Laguerre type as generators of classes of special functions.
62. A. G. Vituškin (USSR): On the approximation of continuous functions by means of rational fractions.
63. L. A. Markuševič (USSR): On the approximation of continuous functions by polynomials on Jordan arcs in the space of several complex variables.
64. E. M. Čirka (USSR): Approximation of continuous functions by holomorphic functions on Jordan arcs in C^n .
65. A. Selberg (USA): Some remarks on discontinuous groups acting on a product of unit disks.
66. Yu. Manin (USSR): On sections of pencils of elliptic curves.
67. I. P. Pyatetskii-Shapiro, S. Gindikin (USSR): On the algebraic structure of the field of modular functions of Siegel.
68. S. Gusman (USSR): Schottky-Ahlfors forms and certain extremal problems on differentiable manifolds.
69. G. Piranian (USA): Starshaped domains and absolute convergence of power series.
70. G. V. Badalyan (USSR): On the classification and representation of infinitely differentiable functions.
71. P. Erdős (Hungary): On some applications of probability methods to function-theory. On some extremal properties of polynomials.

72. L. Alpar (Hongrie): Convergence absolue et représentation conforme.
73. M. A. Lavrentiev (USSR): On certain classes of quasi-conformal mappings.
74. O. Lehto (Finland): A boundary value theorem for conformal mappings.
75. G. D. Suvorov (USSR): Metric properties of plane and three-dimensional mappings in closed domains.
76. Andrian-Kazaku (Rumania): On extremal problems of quasi-conformal mapping.
77. V. K. Dzyadik (USSR): On the constructive characteristics of functions of Hilbert's classes.
78. P. Turán (Hungary): On the approximation of piece-wise analytical functions by rational functions.
79. Yu. A. Kazmin (USSR): On interpolation by means of successive derivatives.
80. V. S. Videnskii (USSR): Existence and uniqueness of the solution of a problem of interpolation.
81. I. I. Pyatetskii-Shapiro, I. R. Šafarevič (USSR): Galois theory of transcendental extensions and uniformizations.
82. V. Palamodov (USSR): On ideals and modules of analytic functions.
83. M. M. Schiffer (USA): Half order differentials on Riemann surfaces.
84. I. M. Gel'fand, M. I. Graev, I. I. Pyatetskii-Shapiro (USSR): Orispherical mappings and Eisenstein series.
85. A. A. Gol'dberg (USSR): Integration with respect to a non-additive measure and its application to the theory of entire functions.
86. L. A. Rubel (USA): A generalized canonical product.
87. V. P. Havin (USSR): Duality in linear topological spaces of analytic functions and certain applications.
88. H. Shapiro (USA): Quasi-analyticity and an extended maximum principle.
89. Yu. Yu. Trochimčuk (USSR): On conformal and interior mappings in space.
90. K. Szilárd (Hungary): On a known generalization of the notion of convexity for plane domains and its application on the derivation of distortion theorems in the theory of conformal mappings.
91. F. D. Gachov (USSR): Analytic continuation-method for the solution of functional equations.
92. G. A. Djanashya (USSR): A Wiener-Hopf equation with bounded right-hand side and its connection with the problem of the linear adjoint with generalized boundary values.
93. A. S. Djafarov (USSR): On certain properties of analytic functions of the type of „embedding theorems“.
94. G. Ts. Tumarkin (USSR): Conditions for the convergence of the boundary values of a sequence of analytic functions and approximation on rectifiable curves.
95. S. O. Sinanyan (USSR): On polynomial approximation in the mean.
96. P. K. Suetin (USSR): Asymptotic properties of polynomials orthogonal on a contour.
97. S. Ya. Havinson (USSR): On the approximation and representation of functions on the thin sets.
98. P. Pfluger, P. Henrici (Switzerland): Truncation error estimates for Stieltjes fractions.
99. Yu. N. Kesizyan (USSR): Certain questions connected with sequences of polynomials.

100. P. Lelong (France): Fonctions entières (n variables) et fonctions plurisousharmoniques de type exponentiel. Applications à l'analyse fonctionnelle.
101. V. Vladimirov (USSR): Problems on the linear conjugate of holomorphic functions of several complex variables.
102. L. Aizenberg (USSR): Integral representation of holomorphic functions of several complex variables and certain of their applications.
103. S. A. Akopyan (USSR): Generalization of two theorems of Paley and Wiener.
104. Z. Charzyński (Poland): The first and second variation of bounded univalent functions.

APPENDIX D

International Colloquium on Algebraic Geometry

Programme

1. Prof. Rees: Local birational geometry.
2. Prof. Bombieri: On Galois coverings over finite fields.
3. Prof. Botella: Sobre las topologias q -adicas en un anillo local.
4. Prof. Mammanna: Proprietà gruppali delle corrispondenze cremoniane.
5. Prof. Néron: Hauteurs des points rationnels d'une variété abélienne définie sur un corps global.
6. Prof. Dieudonné: Group schemes and formal groups.
7. Prof. Etayo: Algunas consideraciones sobre sistemas lineales.
8. Prof. Mallol: Bases normales de F. K. Schmidt y genero de Rosenlicht.
9. Prof. Abellanas: Total algebraic varieties.
10. Prof. Nagata: Some sufficient conditions for the fourteenth problem of Hilbert.
11. Prof. Marchionna: Sui caratteri dei sistemi lineari di una varietà algebrica normale.
12. Prof. Laplaza: Imagen reciproca de un prefasciculo.
13. Prof. Sancho San Roman: Valoraciones subordinadas de una valoración dada.
14. Prof. Nastold: Nonarchimedean function theory.
15. Prof. Salmon: Proprietà dei complementi m -adici e problemi geometrici di intersezioni complete.
16. Prof. Bingen: Differentials of the second kind on algebraic varieties over fields of characteristic zero.
17. Prof. Demaria: Alcune osservazioni sugli indici d'irregolarità di Hodge.
18. Prof. Bujanda: Sobre el concepto de anillo local.

APPENDIX E

International Symposium on Algebraic Geometry

Scientific Programme

1. *La geometria delle strutture finite.*
 - B. Segre: Strutture finite e geometria algebrica.
 - D. Dugué: Geometria algebrica e statistica.
 - J. A. Todd: Una rappresentazione del gruppo di Mathieu M_{24} mediante un gruppo di collineazioni.
 - E. Bombieri: Nuovi risultati sulle ipersuperficie cubiche di dimensione 3.
 - H. Hasse: Funzioni modulari e curve ellittiche sopra campi finiti.
 - L. Gauthier: Semirazionalità delle varietà sesquipolari.

2. *L'estrema algebrizzazione della geometria algebrica.*

- C. Procesi: Un teorema degli zeri di Hilbert nel caso non commutativo.
- M. Artin: Estensioni algebriche degli anelli locali.
- G. Ancochea: Punti prossimi in geometria algebrica.
- P. Abellanas: Fascio sullo spettro totale di un anello.

3. *Topologia Algebrica — Singolarità — Varietà complesse.*

- W. Hodge: La topologia delle varietà algebriche negli spazi proiettivi complessi.
- M. Rosenlicht: L'operazione di un toro sopra una varietà proiettiva
- D. B. Scott: Alcuni spazi fibrati algebrico-geometrici.
- A. Bassi: Polinomi e dualità in un'algebra di Boole con topologia.
- A. Lichnérowicz: Varietà complesse e tensore di Bergmann.
- F. Hirzebruch: Singolarità delle superficie complesse.
- P. Du Val: Curve razionali rappresentanti relazioni modulari

4. *Sviluppi dell'indirizzo classico.*

- P. Burniat: La classificazione delle superficie algebriche.
- L. Reich: Sistemi unirazionali n sulle varietà algebriche.
- B. L. van der Waerden: La teoria degli invarianti dei sistemi lineari sulle varietà.
- S. Abhyankar: Invarianza birazionale del genere aritmetico.
- M. F. Atiyah: Il teorema di Lefschetz sui punti fissi ed il teorema di Riemann-Roch.
- E. Marchionna: Dimensione virtuale di un sistema lineare di iper-superficie sopra una varietà algebrica singolare.
- Ch. Galbura: Covarianti d'immersione nella geometria sopra una varietà algebrica.

5. *Relazioni di aderenti non partecipanti.*

- H. Guggenheimer (Minneapolis): Sugli intorni delle singolarità delle varietà algebriche.
- M. Herrmann (Halle-Wittenberg): Il ruolo dei posti nella teoria algebrica delle specializzazioni.
- E. Kähler (Amburgo): Aritmetica bidimensionale.
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