

(4) addresses of professors; (5) students' societies; (6) index of courses; (7) index of regulations; (8) index of names. Among the courses announced by the Faculty of Science for the semester beginning November 12, 1894, are: Darboux, Theory of rectilinear congruences and of the deformation of surfaces,—Picard, Study of curves defined by differential equations. Investigation of linear differential equations, particularly from the point of view of the theory of continuous and discontinuous groups,—Appell, General laws of equilibrium and motion,—Tisserand, Theory of the motions of the satellites of Jupiter and Saturn,—Poincaré, Study of the theory of the Newtonian potential,—Boussinesq, Study of the equilibrium and motion of elastic solids and of the resistance, either statical or dynamical, of these bodies. Supplementary courses, including conferences upon subjects required for the *Agrégation des Sciences mathématiques*, are given by Messrs. Raffy, Koenigs, Andoyer, Puiseux, Painlevé, and others. T. S. F.

NOTES.

A REGULAR meeting of the AMERICAN MATHEMATICAL SOCIETY was held Saturday afternoon, November 24, at three o'clock, the President, Dr. McClintock, in the chair. Professor John H. Kleinheksel, of Hope College, Holland, Mich., and Mr. Henry Freeman Stecker, of the University of Wisconsin, Madison, Wis., having been duly nominated, and being recommended by the Council, were elected to membership. The following papers were presented:

(1) Mr. C. S. PEIRCE: "Rough notes on geometry. Constitution of real space."

(2) Professor E. HASTINGS MOORE: "The group of holocedric transformation into itself of a given group."

In the absence of Professor Moore, his paper was read by the Secretary. It appears in the present number of the BULLETIN, page 61. Mr. Vatslov A. Hlasko, who was present by invitation, exhibited and explained a model, which he had constructed, representing a three-dimensional projection of the regular figure of four dimensions bounded by six hundred tetrahedra.

WE record with regret the death, on November 8 last, of William Curns Lawrence Gorton, professor of mathematics and astronomy at the Woman's College of Baltimore.

DR. H. T. EDDY has accepted an appointment as professor

of mechanics and engineering at the University of Minnesota, Minneapolis.

THE annual meeting of the London Mathematical Society was held on the evening of November 8. The following officers were elected for the coming year: President, Major Macmahon; Vice-Presidents, Prof. M. J. M. Hill, Mr. A. B. Kempe, Mr. A. E. Love; Treasurer, Dr. J. Larmor; Secretaries, Mr. M. Jenkins, Mr. R. Tucker; other members of the Council, Mr. A. B. Bassett, Mr. G. H. Bryan, Lieut.-Col. J. R. Campbell, Lieut.-Col. A. J. C. Cunningham, Prof. E. B. Elliott, Dr. J. W. L. Glaisher, Prof. A. G. Greenhill, Dr. E. W. Hobson, Prof. W. H. H. Hudson. An address entitled "Mathematics" was delivered by Mr. A. B. Kempe, the retiring president.

T. S. F.

THE meeting of the German Mathematical Association was held this year at Vienna, during the last week of September. The following is a partial list of the papers read:

CZUBER (Vienna): A symbolic calculus on curves of deficiency one.

DYCK (Munich): On the theory of characteristics of systems of functions.

GEGENBAUER (Vienna): On prime numbers.

GORDAN (Erlangen): The resolution of curves into straight lines.

KLEIN (Göttingen): On homogeneous linear differential equations of the second order with two variables.

KOHN (Vienna): Generalization of a fundamental concept of the geometry of position.

KÖNIGSBERGER (Heidelberg): On the theory of partial differential equations.

MANDL (Prossnitz): A criterion for the irreducibility of integral functions.

MAYER (Clausthal): Formation of resultants in trigonometry.

NAGY (Rome): (a) On the Jevons-Clifford problem; (b) Introduction to the theory of logical forms.

PESCHKA (Vienna): On the desirability of lectures on descriptive geometry in the universities.

SCHAPIRA (Heidelberg): (a) On homoidal functions; (b) On invariants of transformations and iterations.

SCHLESINGER (Berlin): On Poincaré's representation of the integrals of a homogeneous linear differential equation of the second order as single-valued functions of one parameter.

SYMONY (Vienna): (a) On the classification of knots; (b) On the relation of topology to geometry and mechanics.

STÄCKEL (Halle): Application of Lie's theory of groups to dynamics.

STUDNÍČKA (Prague): On functions of a quaternion variable.

TAUBER (Vienna): Poisson's integral and its conjugate.

VASILIEV (Kazàn): Lobachevsky's views on the theory of parallels before 1826.

WIRTINGER (Vienna): On the connection of Kummer's surface with the projective generation of plane quartics having a double point.

ZINDLER (Vienna): A new method for generating a linear complex through two rotations.

ZSIGMONDY (Vienna): On congruencies having no roots with respect to a prime modulus.

THE magnificent library of the late Prince Baldassare Boncompagni, of Rome, consisting of 18,000 printed works and 600 manuscripts, probably the most valuable private collection on the history of mathematics, will be offered for sale. It had been the Prince's intention to bequeath the whole collection to the library of the Vatican. But it appears that he died before he could accomplish his purpose.

THE more important mathematical works announced as in press by Messrs. Gauthier-Villars et Fils are in great part continuations. The second volume of J. TANNERY and J. MOLK's "Éléments de la théorie des fonctions elliptiques" concludes the differential calculus of these functions. The third volume of FERMAT's works will contain, besides supplements to Vol. II, French translations of Fermat's Latin papers, of his correspondence with Wallis, and of Jacques de Billy's "Inventum novum." The second part of MERAY's "Leçons nouvelles sur l'analyse infinitésimale et ses applications géométriques" is devoted to a monographic study of the principal functions of a single variable. The second volumes are also in press of P. APPELL's "Traité de mécanique rationnelle," of B. BAILLAUD's "Cours d'astronomie," and of B. NIEWENGLOWSKI's "Cours de géométrie analytique." The fourth and last volume of F. TISSERAND's "Traité de mécanique céleste" will treat the perturbations of the minor planets by the methods of Cauchy, Hansen, and Gylden, and will develop the theory of the motion of the satellites.

A. Z.