

be convergent and

$$\lim_n \sum_p |x_{np}|^m = \sum_p |x_p|^m$$

is that

$$\lim_n \sum_p |x_{np} - x_p|^m = 0.$$

In the proof of this theorem there arises another necessary and sufficient condition concerning itself with the limit of the sum of a sequence of series of positive terms.

H. E. SLAUGHT,  
*Secretary of the Section.*

#### THE TWENTY-FIRST REGULAR MEETING OF THE SAN FRANCISCO SECTION.

THE twenty-first regular meeting of the San Francisco Section of the Society was held at Stanford University, on Saturday, April 6, 1912. About fifteen persons were present, including the following members of the Society:

Professor R. E. Allardice, Mr. B. A. Bernstein, Dr. Thomas Buck, Professor H. F. Blichfeldt, Professor G. C. Edwards, Professor M. W. Haskell, Professor L. M. Hoskins, Professor D. N. Lehmer, Professor H. C. Moreno, Professor E. W. Ponzer.

Morning and afternoon sessions were held, Professor Hoskins, chairman of the Section, presiding.

The following papers were presented at this meeting:

(1) Mr. B. A. BERNSTEIN: "On the relation between spaces in  $n$ -dimensional space and their concrete representation for the space of four dimensions."

(2) Dr. THOMAS BUCK: "Some periodic orbits of three finite bodies."

(3) Dr. S. LEFSCHETZ: "On cubic surfaces and their nodes."

(4) Professor H. F. BLICHFELDT: "On the order of linear homogeneous groups. Fifth paper."

(5) Mr. B. A. BERNSTEIN: "On an algebra of probability" (preliminary communication).

In the absence of the author the paper by Dr. Lefschetz was read by title. Abstracts of the papers follow.