

The following is a summary of Dr. Porter's paper : Consider  $3m - s - 1$  arbitrary fixed points  $P$  on a non-singular cubic  $C_3$ , and  $u_i = \int_{ab}^{x_i y_i} du$  the integral of first kind on  $C_3$ , ( $ab$ ) being a point of inflexion. If an  $m$ -ic have a  $s - 1$  order contact at  $u_1$ , it will cut  $C_3$  again at  $u_2$ ,  $su_1 + u_2 \equiv C$  (mod.  $\omega, \omega'$ ) where  $C = \sum u_i$  at the points  $P$ : The Schliessungsproblem thus suggested yields at once a proof of Fermat's theorem  $a^n - a \equiv 0$  (mod.  $n$  (prime)) and the generalized form of the theorem  $F(a, n) \equiv 0$  (mod.  $n$ ). When  $m = 1, s = 2$ , we have systems of closed polygons. In case the polygon is a triangle, the equation of  $C_3$  referred to it may be written

$$\frac{x}{y} + \frac{y}{z} + \frac{z}{x} + 2\eta = 0.$$

The twenty-four in-circumscribed triangles thus determined fall into four groups, each associated with an inflexion triangle, and each triangle of a group six ways perspective with its associate inflexion triangle. This configuration of inflexion triangles and in-circumscribed triangles presents numerous interesting geometrical properties.

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## THE UNDERGRADUATE MATHEMATICAL CURRICULUM.

*REPORT OF THE DISCUSSION AT THE SEVENTH SUMMER MEETING OF THE AMERICAN MATHEMATICAL SOCIETY.*

THE final session of the Seventh Summer Meeting of the Society was devoted to an organized discussion of the following question :

*What courses in mathematics shall be offered to the student who desires to devote one-half, one-third, or one-fourth of his undergraduate time to preparation for graduate work in mathematics ?*

The following topics were also suggested as a general basis of discussion :

How early in the course may the lecture method be used with profit ?